COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

STEPHEN R. MAGUIN
Chief Engineer and General Manager

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES
17 FEBRUARY 23, 2010
SACHI A. HAMAI
EXECUTIVE OFFICER

February 23, 2010

File No. 31R-106.10

REVISED

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL GAS COLLECTION SYSTEM – 2010
CONSIDER NEGATIVE DECLARATION
APPROVE EXPENDITURE FROM REFUSE TRUST FUND

(SUPERVISORIAL DISTRICT 3) (3-VOTES)

IT IS RECOMMENDED THAT YOUR BOARD:

1. Acting as a responsible agency for the Gas Collection System 2010 Project, consider the Negative Declaration prepared by the County Sanitation District 2 of Los Angeles County, together with any comments received during the public review process; certify that the Board has independently considered and reached its own conclusions regarding the environmental effects of the project as shown in the Negative Declaration; and approve the project;

2. Authorize expenditure in the amount of $344,360 from the Los Angeles County Refuse Disposal Trust Fund for the Calabasas Landfill Gas Collection System - 2010 project.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to consider the previously adopted Negative Declaration (ND) by the County Sanitation District No. 2 (District) and authorize the expenditure of funds from the Los Angeles County Refuse Disposal Trust Fund. At the

regular meeting on December 9, 2009, the ~~Board of Directors of County Sanitation~~ District ~~No. 2~~ approved and authorized the award of a contract for construction of the Calabasas Landfill Gas Collection System - 2010 project and authorized the expenditure for the project from the Los Angeles County Refuse Disposal Trust Fund**,** subject to the approval of the County of Los Angeles.

The~~is~~ project will expand the existing landfill gas collection system at the Calabasas Landfill to a recently completed refuse fill area~~s~~ to provide for the continued collection and disposal of landfill gas to protect public health and the environment. Landfill gas is a product of the natural decomposition of organic materials disposed of in a landfill. It is primarily composed of carbon dioxide and methane, but contains trace amounts of odorous compounds. Landfill gas control systems are required to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1, which sets standards for landfill gas emissions.

The Calabasas Landfill Gas Collection System – 2010 project falls under the scope of the Calabasas Landfill Gas Collection System Master Plan – 1996, which described the extensions to the gas collection system that would be required through the remaining life of the landfill. Extensions to the gas collection system have been constructed approximately on an annual basis such that the existing gas control system currently consists of 669 vertical gas collection wells, 97,091 feet of horizontal gas collection trenches fitted with gas collection piping, as well as a system of header and lateral lines to convey landfill gas to the flaring station for combustion, and a condensate collection system.

The Calabasas Landfill Gas Collection System – 2010 project includes construction of approximately 3,500 feet of gas collection trenches fitted with steel gas collection piping and 2,000 feet of PVC gas headers and laterals. The project is located on the east side of the landfill on lift 3 of the phase 2B fill area. Construction is scheduled to begin in April 2010 and should last approximately three months.

FISCAL IMPACT / FINANCING

The low bid for construction of the project was in the amount of $304,360. It is anticipated that project construction, engineering, and contingencies will total approximately $344,360. Funding for the project will be from the Los Angeles County Refuse Disposal Trust Fund**,** which has sufficient funds for the project. The recommended action does not affect any County revenue or expenditures.

FACTS AND PROVISIONS / LEGAL REQUIREMENTS

The Joint Powers Agreement that established the Los Angeles County Refuse Disposal Trust Fund allows for expenditures from the Trust Fund for the purpose of constructing fixed improvements necessary for conducting refuse disposal operations. It requires that such expenditures be made only with the consent and approval of both the County and the District.

ENVIRONMENTAL DOCUMENTATION

In 1996, the District, as lead agency, adopted a Negative Declaration for the Calabasas Landfill Gas Collection System Master Plan. The project involved the extension of the gas collection system into filled areas for the remaining life of the site. The 2010 Project will expand the gas collection system to newly filled landfill areas and is contained within the landfill permitted footprint. The proposed project falls within the scope of the District's 1996 ND.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The recommended action does not affect other County services or projects.

CONCLUSION

Please return one approved copy of the Board letter to the Sanitation Districts.

Very truly yours,

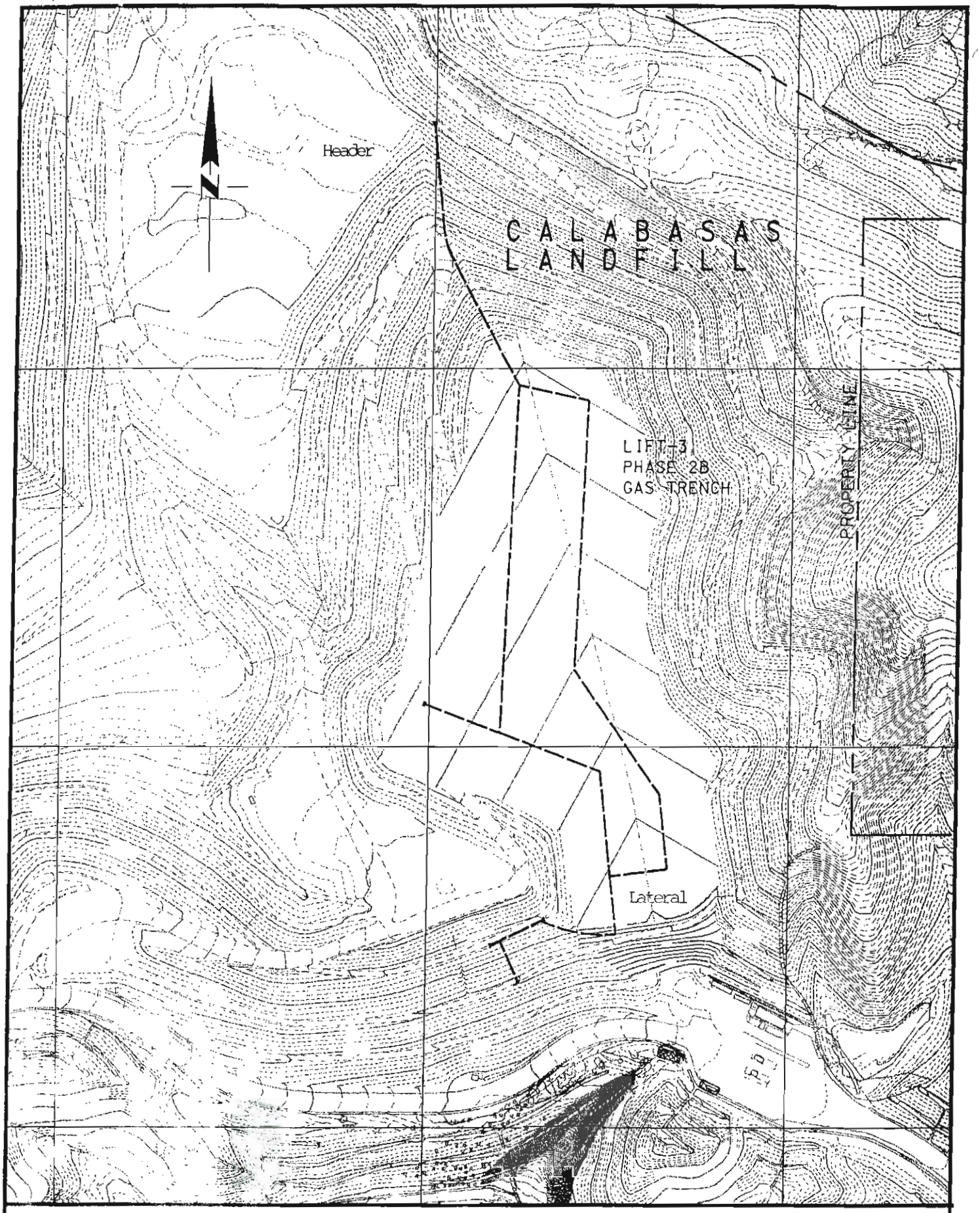
Stephen R. Maguin

SRM:db

Attachments

c: Gail Farber
Director, Los Angeles County Public Works

Pat Proano
Assistant Deputy Director, Environmental Programs Division



CALABASAS LANDFILL GAS COLLECTION SYSTEM – 2010

205-4.9

NOTICE OF DETERMINATION

ORIGINAL REC'D

SEP 30 1996

COUNTY CLERK

BY [illegible] DEPUTY

A. SHELLS

TO: County Clerk, County of Los Angeles
12400 E. Imperial Highway, Room 1101
Norwalk, California 90650

FROM: County Sanitation District No. 2 of Los Angeles County
1955 Workman Mill Road
Whittier, California 90601

SUBJECT: Filing of Notice of Determination in Compliance with Sections 21108 and 21152 of the Public Resources Code

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NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

CONTACT PERSON: Beth Erlanson -- Telephone Number: (310) 699-7411

PROJECT LOCATION: Calabasas Landfill
5300 Lost Hills Road
Agoura, CA 91301

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is located in unincorporated Los Angeles County, near Agoura, California, north of the Ventura Freeway (U.S. 101). It is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

This is to advise that on September 11, 1996 the Board of Directors of County Sanitation District No. 2 of Los Angeles County has approved the above described project and has made the following determinations regarding the above described project:

1. The project will not have a significant effect on the environment, and there is no evidence that the project will have any potential for adverse effect on the wildlife resources.
2. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA, and reflects the independent judgment of County Sanitation District No. 2 of Los Angeles County.

The Negative Declaration and record of proceedings may be examined at the District Office, 1955 Workman Mill Road, Whittier, California 90601.

Date: Sept 26, 1996

Charles W. Carry

Charles W. Carry
Chief Engineer and General Manager

96056093

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

FINAL NEGATIVE DECLARATION

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

FINDINGS: It is hereby found that the above named project will not have a significant effect upon the environment and that there is no evidence that the proposed project will have any potential for adverse effect on wildlife resources. These findings are based upon the independent judgment of County Sanitation District No. 2 of Los Angeles County.

INITIAL STUDY: An initial study of this project was undertaken and prepared in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether this project might have a significant effect on the environment. A copy of such initial study is attached hereto and by reference incorporated herein. Such initial study documents reasons to support the above findings.

MITIGATION MEASURES: None

Date: September 25, 1996

Charles W. Carry
Chief Engineer and General Manager

MEMORANDUM

September 13, 1996

MEMO TO: Don Nellor

FROM: June Nguyen

SUBJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

In accordance with the 1990 Clean Air Act Amendments Title V Operating Permits Program, the Sanitation Districts have prepared the gas collection system plans for the remaining life of the Calabasas Landfill. Construction of gas collection systems are ongoing projects at landfill sites. Under Title V, the permitting process will be streamlined into a master plan for approximately 20 years. The Calabasas Landfill Gas Collection System Master Plan proposes 900 additional vertical wells and 165,000 additional linear feet of horizontal trenches to be installed in phased construction over the remaining life of the site. The attached drawing depicts the general locations of proposed gas collection wells, collection trenches and lateral lines.

Also attached is the Negative Declaration for the project, to be reviewed and considered by the Board of Directors. Comments received on the Proposed Negative Declaration have been incorporated into the Final Negative Declaration.

205-4.9

NOTICE OF DETERMINATION

TO: County Clerk, County of Los Angeles
12400 E. Imperial Highway, Room 1101
Norwalk, California 90650

FROM: County Sanitation District No. 2 of Los Angeles County
1955 Workman Mill Road
Whittier, California 90601

SUBJECT: Filing of Notice of Determination in Compliance with Sections 21108 and 21152 of the Public Resources Code

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NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

CONTACT PERSON: Beth Erlanson -- Telephone Number: (310) 699-7411

PROJECT LOCATION: Calabasas Landfill
5300 Lost Hills Road
Agoura, CA 91301

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is located in unincorporated Los Angeles County, near Agoura, California, north of the Ventura Freeway (U.S. 101). It is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does <u>not</u> involve expansion of the landfill permit area nor does it require expansion of the flare system.

This is to advise that on September 11, 1996 the Board of Directors of County Sanitation District No. 2 of Los Angeles County has approved the above described project and has made the following determinations regarding the above described project:

1. The project will not have a significant effect on the environment, and there is no evidence that the project will have any potential for adverse effect on the wildlife resources.
2. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA, and reflects the independent judgment of County Sanitation District No. 2 of Los Angeles County.

The Negative Declaration and record of proceedings may be examined at the District Office, 1955 Workman Mill Road, Whittier, California 90601.

Date: Sept 26, 1996

Charles W. Carry
Chief Engineer and General Manager

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

FINAL NEGATIVE DECLARATION

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

FINDINGS: It is hereby found that the above named project will not have a significant effect upon the environment and that there is no evidence that the proposed project will have any potential for adverse effect on wildlife resources. These findings are based upon the independent judgment of County Sanitation District No. 2 of Los Angeles County.

INITIAL STUDY: An initial study of this project was undertaken and prepared in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether this project might have a significant effect on the environment. A copy of such initial study is attached hereto and by reference incorporated herein. Such initial study documents reasons to support the above findings.

MITIGATION MEASURES: None

Date: September 25, 1996

Charles W. Carry
Chief Engineer and General Manager

CALIFORNIA DEPARTMENT OF FISH AND GAME
CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is located in unincorporated Los Angeles County, near Agoura, California, north of the Ventura Freeway (U.S. 101). It is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

FINDING: An initial study has been conducted by the County Sanitation District No. 2 of Los Angeles County in order to evaluate the potential for adverse environmental impact. The District finds that there is no evidence that the proposed project will have any potential for adverse effect on wildlife resources.

CERTIFICATION: I hereby certify that County Sanitation District No. 2 of Los Angeles County has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

Date: Sept 26, 1996

Charles W. Carry
Chief Engineer and General Manager
County Sanitation District No. 2 of Los Angeles County

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

ENVIRONMENTAL IMPACT ASSESSMENT

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

STAFF DETERMINATION: The District's staff, having undertaken and completed an initial study of this project in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether the proposed project might have a significant effect on the environment, has reached the following conclusion:

(x) 1. The project will not have a significant effect on the environment; therefore, a negative declaration should be prepared.

( ) 2. The project, if modified in accordance with certain mitigation measures set forth in the initial study and enumerated in Exhibit "A" attached hereto and by reference incorporated herein will not have a significant effect on the environment. Upon completion of such procedures as may be necessary to assure such modification, a negative declaration should be prepared.

( ) 3. The project may have a significant effect on the environment; therefore, an EIR will be required.

Date: 7/17/96

Grace R. Chan
Supervising Engineer, Planning Section
Solid Waste Management Department

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

REVISED INITIAL STUDY

PROJECT TITLE:
Calabasas Landfill Gas Collection System Master Plan - 1996

EXACT LOCATION:
The proposed system will be located at the Calabasas Landfill, 5300 Lost Hills Road, Agoura, California 91301. Exhibits 1 and 2 show the location of the landfill site.

REASON FOR PROJECT:
As an environmental control measure, the landfill gas collection system will be extended into active fill areas over the remaining life of the site (approximately 20 years). Extension of the future gas system will be constructed in compliance with the South Coast Air Quality Management District Rule 1150.1 and Title V (40 CFR 70). Requisite extension of the gas collection system is a routine part of ongoing operations at the site.

DESCRIPTION OF PROJECT:
The proposed project will involve extension of the existing gas collection system into fill areas over the remaining life of the site -- approximately 20 years. The gas collection system master plan will encompass the currently permitted landfill area displayed in Exhibit 3. As areas are filled, the system will be constructed in compliance with the South Coast Air Quality Management District Rule 1150.1. The existing gas system has approximately 509 vertical gas collection wells, 48 horizontal gas collection trenches and 63,000 feet of PVC header lines installed on completed slopes and top deck areas of the active landfill.

In accordance with the Title V (40 CFR 70) permit, the Sanitation Districts of Los Angeles County have prepared the gas collection system plans for the remaining life of the Calabasas Landfill. Construction of gas collection systems are ongoing projects at landfill sites. Under Title V (40 CFR 70), the permitting process will be streamlined into a master plan for approximately 20 years. The Calabasas Landfill Gas Collection System Master Plan proposes approximately 900 additional vertical wells and 165,000 additional linear feet of horizontal trenches to be installed in phased construction over the remaining life of the site. Exhibit 4 depicts the general locations of proposed gas collection wells, collection trenches and lateral lines. A typical construction project could include approximately 80 wells and 12 trenches and last approximately three months. The specific layout of each construction phase will vary depending upon the geometry of the refuse fill existing at the time of construction. Prior to construction, the drawings and construction schedules will be submitted to the South Coast Air Quality Management District.

The proposed work includes the construction of vertical gas collection wells (both pile-driven and auger drilled), horizontal gas collection trenches, an extension to the condensate system, and an above ground piping system which consists of headers and lateral lines for transport of landfill gas to the existing flaring station. The method of auger drilling vertical wells includes the drilling of the well, installation of the well casing, and backfilling with uncrushed gravel and native soil. The construction of horizontal gas collection trenches consists of trench excavation, the installation of corrugated steel piping, and backfilling with uncrushed gravel and native soil. The collected gas will be combusted at the existing flare station.

Trenches will be excavated to a depth of approximately 6 feet. Depending on location, the depth of the wells will vary from 40 to 80 feet. Vertical wells will be pile driven in the portion of the existing site where hazardous waste disposal had occurred prior to July 1980. Auger type drilling will take place only

in native soils or existing disposal areas where no hazardous waste was disposed. Horizontal collection trenches will be placed only in areas where no hazardous waste disposal occurred.

The gas control system currently in place consists of vertical gas wells and horizontal gas trenches, piping systems, a condensate collection system, and a flaring station. Prior to constructing the new gas collection wells, the adjoining header lines will be installed, connected to the existing gas system, and placed under vacuum. A gas well cover box will be used during gas well drilling to control potential odors. This box, in conjunction with existing header lines, will be operable (under vacuum) prior to gas well drilling operations. Exposed spoils resulting from drilling and trenching operations, as well as any open trenches and transfer trucks used, will be deodorized. The excavated refuse material will be disposed of on a continuous basis at the working face of the landfill operation.

Dust abatement procedures will be maintained on a continuing basis during all earth moving activities. Potentially hazardous and flammable gas may be present within the construction site as gas extraction wells and gas collection trenches are constructed and connected to the header pipelines. Monitoring equipment will be used to test for the presence of landfill gas and for adequate levels of oxygen. Appropriate corrective action, such as increasing vacuum to the well cover box, will be taken as necessary. No open flames of any kind will be allowed within 50 feet of open trenches.

Installation of the gas wells will occur during normal landfill operating hours. A drilling operation results in noise levels of approximately 89 dBA at 50 feet. Taking into account attenuation over distance, this translates into a noise level of approximately 71 dBA at the closest residence (approximately 500 feet from drilling operations). This noise level will be under the 75 dBA noise level limit for short-term construction activities allowed by the County of Los Angeles Noise Ordinance.

RESPONSIBLE/REVIEWING AGENCIES:

The following agencies will be involved in the review of the project: California Integrated Waste Management Board, County of Los Angeles Department of Health Services, National Park Service/Santa Monica Mountains National Recreation Area and South Coast Air Quality Management District.

ENVIRONMENTAL SETTING OF PROJECT:

The Calabasas Landfill is located within the Santa Monica Mountains in western Los Angeles County, California (refer to Exhibits 1 and 2). The landfill property consists of 505 acres of land. The land to the south has been developed and is known as the Saratoga Hills and Saratoga Ranch subdivisions. The County property is bounded on the east, west and north by rolling hills with moderate elevation differences. These hills are covered with native grasses and sage scrub. Some slopes are sparsely vegetated; scattered trees are present throughout the area.

The Calabasas Landfill began disposal operations in 1961. It currently accepts only non-hazardous municipal solid waste. The operation handles approximately 2,250 tons per day of refuse. Approximately 17.3 million tons of refuse have been placed since the landfill opened. The remaining life of the site is estimated to be approximately 20 years.

COMPATIBILITY WITH ZONING AND PLANNING:

In June 1958, the Sanitation Districts were granted a zone exception by the Los Angeles County Planning Commission to conduct sanitary landfilling operations on a 300-acre parcel constituting the southern portion of the present property. In June 1967, the Regional Planning Commission granted a zone exception to expand landfill operations into an 80-acre parcel in the northwestern portion of the present property. In August 1972, a Conditional Use Permit (CUP) was issued by the Regional Planning Commission to extend landfill operations into a 36.3-acre parcel in the northeast portion of the Districts'

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. The creation of objectionable odors?	☐	☐	☒	☐
e. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	☐	☐	☐	☒

Explanation: Potential air emissions will be prevented by routing all collected landfill gas to the flare system where it will be combusted. Gas system extension will not exceed the limits of current South Coast Air Quality Management District permits. Construction related emissions are expected during construction of the project which is expected to occur in phases over a twenty year period. The total emissions due to the operation of trenching equipment, dump trucks, drilling equipment, loader, water truck and other necessary equipment are estimated to be lower than South Coast Air Quality District's CEQA Handbook construction activities threshold limits for air quality impacts. Construction emissions calculations are shown in the Appendix.

3. Water. Will the proposed project result in:

a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	☐	☐	☐	☒
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?	☐	☐	☐	☒
c. Alterations to the course or flow of flood waters?	☐	☐	☐	☒
d. Change in the amount of surface water in any water body?	☐	☐	☐	☒
e. Discharge into surface waters?	☐	☐	☐	☒
f. Alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity?	☐	☐	☐	☒
g. Alteration of the direction or rate of flow of ground waters?	☐	☐	☐	☒
h. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	☐	☐	☐	☒
i. Substantial reduction in the amount of water otherwise available for public water supplies?	☐	☐	☐	☒
j. Exposure of people or property to water related hazards, such as flooding or tidal waves?	☐	☐	☐	☒

Explanation: This project does not involve, address or result in physical change of any surface or ground waters.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Plant Life. Will the proposed projects result in:				
a. Change in the diversity of species, or number of species of any plants (including trees, shrubs, grass, crops, and aquatic plants)?	☐	☐	☐	☒
b. Reduction of the numbers of any unique, rare or endangered species of plants?	☐	☐	☐	☒
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	☐	☐	☐	☒
d. Reduction in acreage of any agricultural crop?	☐	☐	☐	☒

Explanation: This project does not involve, address or result in physical change due to any plant life or any plant habitat.

5. Animal Life. Will the proposed project result in:				
a. Change in the diversity of species, or numbers of species of any birds, land animals, reptiles, fish, shellfish, benthic organisms?	☐	☐	☐	☒
b. Reduction of the numbers of any unique, rare or endangered species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
c. Introduction of new species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
d. Deterioration to, or reduction of, the habitats of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
e. Interfere significantly with the movement of any resident or migratory species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒

Explanation: The proposed project does not involve nor result in physical change to any animal life.

6. Noise. Will the proposed project result in:				
a. Increases in existing noise levels?	☐	☐	☒	☐
b. Exposure of people to severe noise levels?	☐	☐	☐	☒

Explanation: Drilling operations will result in a short term minor increase in existing noise levels. Drilling will occur during normal landfill hours and will be within the allowable noise level set forth by the County of Los Angeles Noise Ordinance for construction activities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Light and Glare. Will the proposed project produce new light or glare?	☐	☐	☐	☒

Explanation: This project does not involve the installation of any lighting equipment.

8. Land Use. Will the proposed project result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
Will the proposed project conflict with:				
a. Adopted environmental plans and goals of the community where it is located?	☐	☐	☐	☒
b. Applicable city or county adopted general plans for the area?	☐	☐	☐	☒

Explanation: This project involves extension of the future gas collection system as new areas of the site are filled. The proposed activities will not result in a change either in the present or planned land use of the project site.

9. Natural Resources. Will the proposed project result in:				
a. Increase in the rate of use of any natural resources?	☐	☐	☐	☒
b. Substantial depletion of any non-renewable natural resource?	☐	☐	☐	☒

Explanation: The proposed project will not involve the use nor causes the destruction of any natural resources. The proposed project is not expected to significantly accelerate the use of natural resources or deplete non-renewable resources.

10. Risk of Accident. Does the proposed project involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	☐	☐	☒	☐

Explanation: During auger drilling of wells, gas well boxes will be under a slight vacuum to draw off any landfill gas that may be released. As an additional precaution, open flames will not be allowed within 50 feet of well and trench installation operations.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Population.				
a. Will the proposed project alter the location distribution, density, or growth rate of the human population of an area?	☐	☐	☐	☒
b. Does the proposed project include capacity for a population greater than that now resident in the project area?	☐	☐	☐	☒

Explanation: The proposed project will not alter the human population density if any manner, including population density, distribution, or growth rate.

12. Housing. Will the proposed project affect existing housing, or create a demand for additional housing?	☐	☐	☐	☒

Explanation: This project does not affect existing housing or create a demand for additional housing, since it will not affect the population in any manner.

13. Transportation/Circulation. Will the proposed project result in:				
a. Generation of substantial additional vehicular movement?	☐	☐	☐	☒
b. Effects on existing parking facilities, or demand for new parking?	☐	☐	☐	☒
c. Substantial impact upon existing transportation systems?	☐	☐	☐	☒
d. Alterations to present patterns of circulation or movement of people and/or goods?	☐	☐	☐	☒
e. Alterations to waterborne, rail or air traffic?	☐	☐	☐	☒
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	☐	☐	☐	☒

Explanation: There may be a temporary increase in vehicular traffic during the construction activities immediately around the project area due to the presence of contractors and heavy equipment. However, the construction activities will not result in any permanent change in traffic flow at the project site. This project will not affect waterborne, rail or air traffic, and the project site prohibits bicyclist and pedestrian traffic due to safety concerns normally associated with landfilling activities.

14. Public Services. Will the proposed project have an effect upon, or result in a need for new or altered governmental services?	☐	☐	☐	☒

Explanation: Because the project will not affect the population density, distribution, or growth in any manner, there will be no need for new or altered governmental services due to this project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Energy. Will the proposed project either result in or encourage:				
a. Use of substantial amounts of fuel or energy?	☐	☐	☐	☒
b. Substantial increase in demand upon existing sources of energy?	☐	☐	☐	☒
c. A requirement for the development of new sources of energy?	☐	☐	☐	☒

Explanation: Relatively small amounts of fuels will be used for drilling and trenching activities associated with this project. The electrical energy usage of the site will increase slightly due to increased demand on the existing pumps and blowers. However, this increase in energy use is not expected to be substantial.

16. Utilities. Will the proposed project result in a need for new systems of, or substantial alterations to, the following utilities:				
a. Power or natural gas?	☐	☐	☐	☒
b. Communications systems?	☐	☐	☐	☒
c. Water?	☐	☐	☐	☒
d. Sewer or septic tanks?	☐	☐	☐	☒
e. Storm water drainage?	☐	☐	☐	☒
f. Solid waste and disposal?	☐	☐	☐	☒

Explanation: Because the proposed project will not affect the population density, distribution, or growth in any manner, no alteration in the demand for utilities is anticipated.

17. Human Health. Will the proposed project result in:				
a. Creation of any health hazard or potential health hazard (excluding mental health)?	☐	☐	☐	☒
b. Exposure of people to potential health hazards?	☐	☐	☐	☒

Explanation: If necessary, the Contractor will provide and operate a suitable blower of sufficient capacity to maintain the air within the work area in a condition such that concentration of methane gas is within acceptable limits. Gas well cover box assemblies will be used to control the majority of the decomposition gas released from the landfill during gas well auger drilling.

18. Aesthetics. Will the proposed project result in:				
a. The obstruction of any scenic vista or view open to the public?	☐	☐	☐	☒
b. The creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. The destruction of a stand of trees, a rock outcropping or other locally recognized desirable aesthetic natural features?	☐	☐	☐	☒

Explanation: The proposed trenching and drilling activities will not result in an obstruction of a scenic vista or view, nor will they create an aesthetically offensive site.

19. Recreation. Will the proposed project result in an impact upon the quality or quantity of existing recreational opportunities?	☐	☐	☐	☒

Explanation: The proposed project does not involve, address, nor result in any effect on existing recreational opportunities.

20. Archaeological/Historical. Will the proposed project result in an alteration of a significant archaeological, historical, paleontological or cultural site, structure, object or building?	☐	☐	☐	☒

Explanation: The proposed project will not affect a significant archeological, historical, paleontological or cultural site, structure, object or building in any manner.

21. Mandatory Findings or Significance.

a. Does the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b. Does the proposed project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☒
c. Does the proposed project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant)?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Does the proposed project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

MITIGATION MEASURES: Analysis of environmental effects of the project using the checklist identified several areas where the project would have minor effects; however, no significant environmental effects were determined. The list of significant effects (Appendix G in State Guidelines) was also reviewed and none of the significant effects was found to be associated with the project.

PUBLIC CONTROVERSY: There is no public controversy concerning any environmental effects of the project.

Date: 8-27-96

Donald S. Nellor
Planning Section Head
Solid Waste Management Department

ATTACHMENT A

Construction Emissions

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

VERTICAL GAS COLLECTION WELLS - 900 TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System

(per well installation)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Crane Unit (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Auger Drill (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Wheeled Loader (2)	Diesel	4 hrs	0.572 lb/hr	2.288	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Cement Mixer (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Water Truck (3)	Diesel	40 mi	37.71 gm/mi	3.33	7.05 gm/mi	0.62	21.9 gm/mi	1.93	0.56 gm/mi	0.05	3.17 gm/mi	0.28
Dump Truck (3)	Diesel	40 mi	37.71 gm/mi	3.33	7.05 gm/mi	0.62	21.9 gm/mi	1.93	0.56 gm/mi	0.05	3.17 gm/mi	0.28
Pick-up Truck (3)	Gasoline	16 mi	26.21 gm/mi	0.92	2.33 gm/mi	0.08	1.53 gm/mi	0.05	0.045 gm/mi	0.00	0.21 gm/mi	0.01
Air (1) Compressor	Gasoline	4 hrs	12.6 lb/hr	50.4	0.421 lb/hr	1.684	0.326 lb/hr	1.304	0.017 lb/hr	0.068	0.021 lb/hr	0.084
Electric Generator (1)	Gasoline	1 hrs	12.6 lb/hr	12.6	0.421 lb/hr	0.421	0.326 lb/hr	0.326	0.017 lb/hr	0.017	0.021 lb/hr	0.021
Total (per well) lbs				78.07		5.99		37.71		2.31		2.91
Total (all wells)				70264		5392		33936		2082		2620

Notes:

(1) Emission factors obtained from EPA-AP42, 1985, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment".

(2) Emission factors obtained from EPA AP-42, 1992, Table II-7.1, "Emission Factors for heavy duty diesel powered construction equipment.

(3) Emission factors obtained from ARB EMFAC7F and E7F for LA Co., 1994, Traveling speed was assumed to be 5 mph.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

HEADER LINE INSTALLATION AND PAINTING - 75,000 FEET TOTAL
Information based upon total emissions calculated for Calabasas 1995 Gas Collection System
(per 1000 ft header line)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Loader (1)	Diesel	17 hrs	0.572 lb/hr	9.724	0.25 lb/hr	4.25	1.89 lb/hr	32.13	0.182 lb/hr	3.094	0.172 lb/hr	2.924
Air (2) Compressor	Diesel	17 hrs	0.434 lb/hr	7.378	0.16 lb/hr	2.72	2.01 lb/hr	34.17	0.133 lb/hr	2.261	0.143 lb/hr	2.431
Water Truck (3)	Diesel	42 mi	37.71 gm/mi	3.49	7.05 gm/mi	0.65	21.9 gm/mi	2.03	0.56 gm/mi	0.05	3.17 gm/mi	0.29
Pick-up Truck (3)	Gasoline	66 mi	26.21 gm/mi	3.81	2.33 gm/mi	0.34	1.53 gm/mi	0.22	0.045 gm/mi	0.01	0.21 gm/mi	0.03
Dump Truck (3)	Diesel	85 mi	37.71 gm/mi	7.07	7.05 gm/mi	1.32	21.9 gm/mi	4.10	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Delivery Trucks (3)	Diesel	6 mi	37.71 gm/mi	0.50	7.05 gm/mi	0.09	21.9 gm/mi	0.29	0.56 gm/mi	0.01	3.17 gm/mi	0.04
Air (2) Compressor	Gasoline	8 hrs	12.6 lb/hr	100.8	0.421 lb/hr	3.368	0.326 lb/hr	2.608	0.017 lb/hr	0.136	0.021 lb/hr	0.168
Pick-up Truck (3)	Gasoline	66 mi	26.21 gm/mi	3.81	2.33 gm/mi	0.34	1.53 gm/mi	0.22	0.045 gm/mi	0.01	0.21 gm/mi	0.03
Total (per 1000 ft of header) lbs				136.59		13.06		75.77		5.67		6.51
Total (all header)				10244		981		5683		425		489

Notes:
(1) Emission factors obtained from EPA AP-42, 1992, Table II-7.1, "Emission Factors for Heavy-Duty, Diesel-Powered Construction Equipment".
(2) Emission factors obtained from EPA AP-42, 1985, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment".
(3) Emission factors obatained from EMFAC7F and E7F for LA Co., 1994. Traveling speed was assumed to be 5 mph.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TRENCH INSTALLATION - 165,000 FEET TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System

(per 1000 ft trench)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Loader (1)	Diesel	16 hrs	0.572 lb/hr	9.15	0.25 lb/hr	4	1.89 lb/hr	30.24	0.182 lb/hr	2.91	0.172 lb/hr	2.75
Excavator (1)	Diesel	16 hrs	0.572 lb/hr	9.15	0.25 lb/hr	4	1.89 lb/hr	30.24	0.182 lb/hr	2.91	0.172 lb/hr	2.75
Dump Truck (dirt) (2)	Diesel	84 mi	37.71 gm/mi	6.98	7.05 gm/mi	1.31	21.9 gm/mi	4.06	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Dump Truck (gravel) (2)	Diesel	84 mi	37.71 gm/mi	6.98	7.05 gm/mi	1.31	21.9 gm/mi	4.06	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Water Truck (2)	Diesel	80 mi	37.71 gm/mi	6.65	7.05 gm/mi	1.24	21.9 gm/mi	3.86	0.56 gm/mi	0.10	3.17 gm/mi	0.56
Delivery Trucks (2)	Diesel	10 mi	37.71 gm/mi	0.83	7.05 gm/mi	0.16	21.9 gm/mi	0.48	0.56 gm/mi	0.01	3.17 gm/mi	0.07
Forklift (1)	Diesel	8 hrs	0.572 lb/hr	4.58	0.25 lb/hr	2	1.89 lb/hr	15.12	0.182 lb/hr	1.46	0.172 lb/hr	1.38
Pick-up Trucks (2)	Gasoline	84 mi	26.21 gm/mi	4.85	2.33 gm/mi	0.43	1.53 gm/mi	0.28	0.045 gm/mi	0.01	0.21 gm/mi	0.04
Total (per 1000 ft. trench)				49.18		14.44		86.34		7.61		6.72
Total (all trench)				8115		2383		14576		1255		1439

Notes:

(1) Emission factors obtained from EPA AP-423, 1992, Table II-7.1, "Emission Factors for Heavy-Duty, Diesel Powered Construction Equipment".

(2) Emission Factors obtained from ARB EMFAC7F and E7F for LA Co., 1994. Traveling speed was assumed to be 5 mph.

Total Construction Emissions (lbs)

CO	ROG	NOx	SOx	PM
88623	8756	54195	3762	4548

Total Construction Emissions (tons)

CO	ROG	NOx	SOx	PM
44.3	4.4	27.1	1.9	2.3

Additional PM Emissions (tons)
(Trench excavation material, unpaved road travel)

PM
21.2

This gas collection system plan should cover the remaining fill life of the Calabasas Landfill which should last approximately another 20 yrs.
Therefore, the construction emission impacts per quarter until completion are:

	CO	ROG	NOx	SOx	PM	
Masterplan Project	0.6	0.05	0.3	0.02	0.29	tons
Emission Thresholds,SCAB(1)	24.75	2.5	2.5	6.75	6.75	tons

(1) South Coast Air Basin (SCAB) specified thresholds, 1993 CEQA Air Quality Handbook, South Coast Air Quality Management District.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

PM10 EMISSIONS

Trench excavation - 165,000 ft. total

Emission factors from Table A9-9, SCAQMD Guidelines for Preparing CEQA.

Activity	Emission Factor	Units	Activity Amount	Units	PM Emissions (lbs)
Storage pile filling	0.009075	lb/ton dirt	148500	tons	1347.638
Truck filling	0.02205	lb/ton dirt	148500	tons	3274.425
Total PM Emissions					4622

Unpaved Road Travel Emissions

Emission factors from Table A9-9-D, SCAQMD Guidelines for Preparing CEQA

F= 2.1 x (G/12) x (H/30) x [(I/3)^0.7] x [(J/4)^0.5] x [(365-K)/365]

assume all road travel is on unpaved surfaces

Equipment Type	G	H	I	J	K(1)	F	VMT	E
Pick-up trucks	12	15	2	4	313	0.112625	33210	3740
Water trucks	12	15	5	6	313	0.261963	52350	13714
Dump trucks	12	15	5	6	313	0.261963	70095	18362
Delivery Trucks	12	15	15	18	313	0.979005	2100	2056
Total PM Emissions								37872

Notes:
(1) K is the number of days of precipitation. Because all travelled areas at the landfill are watered, this value is 313 days.

Total Additional PM Emissions

42494 lbs

21.2 tons

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Vertical wells (900 wells total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Crane Unit	3600 hrs	9 gal/hr	32400	7.5 lb/1000 gal	243.0	2.67	3.2	229
Auger Drill	3600 hrs	7 gal/hr	25200	7.5 lb/1000 gal	189.0	2.08	3.2	178
Wheeled Loader	3600 hrs	3.2 gal/hr	11520	43.2 lb/1000 gal	497.7	5.47	1.8	46
Cement Mixer	3600 hrs	1 gal/hr	3600	7.5 lb/1000 gal	27.0	0.30	3.2	25
Water Truck	36000 mi	7 mi/gal	5143	7.05 gm/mi (4)	559.5	6.15	0.55	6
Dump Truck	36000 mi	7 mi/gal	5143	7.05 gm/mi (4)	559.5	6.15	0.55	6

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Air Compressor (6)	3600 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Elec. Generator (6)	900 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pick-up Truck (5)	14400 mi	10 mi/gal	1440	2.33 gm/mi	74.0	0.81	0.64	2.03
Total Toxics Emissions						23.65		492

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

(6) Toxic air pollutant emission factors are not available for these stationary IC engines.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Header line (75,000 feet total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Wheeled loader	1275 hrs	3.2 gal/hr	4080	43.2 lb/1000 gal	176.3	1.94	1.8	16.19
Air Compressor (5)	1275 hrs	3.1 gal/hr	3953	37.5 lb/1000 gal	148.2	1.63	0.782	6.81
Water truck	3150 mi	7 mi/gal	450	7.05 gm/mi (4)	49.0	0.54	0.55	0.55
Dump truck	6375 mi	7 mi/gal	911	7.05 gm/mi (4)	99.1	1.09	0.55	1.10
Delivery trucks	450 mi	5 mi/gal	90	7.05 gm/mi (4)	7.0	0.08	0.55	0.11

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Pick-up trucks (6)	4950 mi	10 mi/gal	495	2.33 gm/mi	25.43	0.28	0.64	0.70
Air compressor (7)	600 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total						5.55		25.5

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Benzene emission factors based on hydrocarbon emissions from EPA AP-42, Table 3.3-1, Formaldehyde emission factors obtained from SCAQMD Table 2, as included in the 1992 ATIR.

(6) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

(7) Toxic air pollutant emission factors are not available for these stationary IC engines.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Trench Installation (165,000 feet total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Wheeled Loader	2640 hrs	3.2 gal/hr	8448	43.2 lb/1000gal	365.0	4.01	1.8	33.52
Excavator	2640 hrs	3.2 gal/hr	8448	43.2 lb/1000gal	365.0	4.01	1.8	33.52
Forklift	1320 hrs	3.2 gal/hr	4224	43.2 lb/1000gal	182.5	2.01	1.8	16.76
Water truck	13200 mi	7 mi/gal	1885.7	7.05 gm/mi (4)	205.2	2.26	0.55	2.29
Dump truck	27720 mi	7 mi/gal	3960.0	7.05 gm/mi (4)	430.8	4.74	0.55	4.80
Delivery trucks	1650 mi	7 mi/gal	235.7	7.05 gm/mi (4)	25.6	0.28	0.55	0.29

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Pick-up trucks (5)	13860 mi	10 mi/gal	1386	2.33 gm/mi	71.19	0.78	0.64	1.96
Total						18.10		93.14

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

TOTAL TOXIC EMISSIONS FROM CONSTRUCTION:

BENZENE	FORMALDEHYDE	
47.30	610.56	lbs

The annual toxic emissions from construction of this project are compared to the annual emissions form the Scholl Canyon Landfill, as reported in the December 1991, Scholl Canyon Landfill Health Risk Assessment. No such data is available for the Calabasas Landfill because an HRA was not required for this site. As can be seen in the table below, the annual emissions for Scholl Canyon resulted in exposure levels considerable lower than the Exposure Guidelines. Therefore, it is reasonable to predict that the emissions form construction of the master plan (over approximately 20 years), will also result in exposure levels below the Guidelines.

Pollutant	Emissions Reported in HRA		Exposure Guideline (ug/m^3)	Plan Emissions (lb/yr) (1)
	lb/yr	Chronic Exposure (ug/m^3)		
Benzene	149	0.41	71	2.36
Formaldehyde	1118	3.06	3.6	30.53

(1) emissions are based upon total emissions from table above divided by 20 years remaining fill life.

COMMENTS

State of California

California Environmental Protection Agency

AUG

MEMORANDUM

To: Chris Belsky
State Clearinghouse
1400 10th Street
Sacramento, CA 95814

Date: August 6, 1996

June Nguyen
Los Angeles County Sanitation District
1955 Workman Road
Whittier, CA 90601

From: Jeannie H. Blakeslee
Environmental Review Section
Permits Branch
Permitting and Enforcement Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH# 96071071 - Proposed Negative Declaration for the Calabasas Landfill Gas Collection System Master Plan, Los Angeles County (SWIS# 19-AA-0056)

Staff of the California Integrated Waste Management Board (CIWMB) have reviewed the proposed negative declaration (ND) for the project cited above. The proposed project is an extension of the existing landfill gas control system at the Calabasas Landfill. The Calabasas Landfill Gas Collection System Master Plan proposes phased installation of 900 additional vertical wells, 165,000 linear feet of horizontal trenches, an extension to the condensate system, an above-ground piping system consisting of headers, and 75,000 feet of lateral lines for transport of landfill gas to the existing flaring station.

Staff offer the following comments pertaining to the ND:

Apparently the specific layout of each phase has not yet been determined, and will depend on the geometry of the refuse. Since the total footage of gas collection wells, collection trenches, and lateral lines is known, the general configuration of the landfill gas control system should be also be known. Staff suggest that a schematic or diagram indicating the general locations of these components be

included in the ND, and we ask that a copy be sent to us for our records. As the project is implemented, the locations of the wells, trenches and lateral lines should be incorporated into the Report of Disposal Site Information.

As this project progresses, we ask that the Los Angeles County Local Enforcement Agency be kept informed.

Thank you for the opportunity to review this document. Please contact me at (916) 255-4708 if your have any questions.

cc: Connie Rocke, LEA
Grace Chan, Los Angeles County Sanitation District

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, 120 SO. SPRING ST.
LOS ANGELES, CA 90012-3606

IGR/CEQA/ND
L. A. County Sanitation
District #2
CALABASAS LANDFILL GAS
COLLECTION SYSTEM
MASTER PLAN - 1996
SCH #96071071 (7045)
LA-101-31.85

July 25, 1996

8-16-96
C

Ms. June Nguyen
Los Angeles County
Sanitation District #2
1955 Workman Mill Road
Whittier, CA 90601

Dear Ms. Nguyen:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced document. This is a proposal to construct vertical gas collection wells, horizontal gas collection trenches, above ground piping system for transport of lateral lines to an existing flaring station, and to extend the condensate system.

We have no comment, however, please be aware that any transport of heavy construction equipment which requires the use of oversize transport vehicles on State Highways will require a Caltrans transportation permit. We recommend that large size trucks which are transporting construction materials and equipment be limited to off-peak commute periods.

If you have any questions regarding this response, please call me at (213) 897-4429.

Sincerely,

original signed by

Steve Buswell
IGR/CEQA Coordinator

cc: CBelsky, State Clearinghouse

bcc: RHelgeson, HQ Transportation Planning/IGR
chrono
mv/7045

RESPONSE TO COMMENTS

Response to Comments from California Integrated Waste Management Board:

In response to the California Integrated Waste Management Board's suggestion, the initial study has been revised to include a drawing indicating the general locations of proposed gas collection wells, collection trenches and lateral lines. As the project is implemented, the locations of the wells, trenches and lateral lines will be incorporated into the Report of Disposal Site Information.

A copy of the Final Negative Declaration will be sent to the California Integrated Waste Management Board as requested.

Response to Comments from California Department of Transportation:

The comments received were general in nature and have been noted. They do not require any response.

MEMORANDUM

Don Magyar SCAQMD requires an Environmental Document consistent with the Title V application.

August 27, 1996

MEMO TO: Don Nellor DN

FROM: June Nguyen JNN

SUBJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

In accordance with the 1990 Clean Air Act Amendments Title V Operating Permits Program, the Sanitation Districts have prepared the gas collection system plans for the remaining life of the Calabasas Landfill. Construction of gas collection systems are ongoing projects at landfill sites. Under Title V, the permitting process will be streamlined into a master plan for approximately 20 years. The Calabasas Landfill Gas Collection System Master Plan proposes 900 additional vertical wells and 165,000 additional linear feet of horizontal trenches to be installed in phased construction over the remaining life of the site. The attached drawing depicts the general locations of proposed gas collection wells, collection trenches and lateral lines.

Also attached is the Negative Declaration for the project, to be reviewed and considered by the Board of Directors. Comments received on the Proposed Negative Declaration have been incorporated into the Final Negative Declaration.

Actions requested of the Board:

1. Approve the Calabasas gas collection master plan (the project)
2. Certify the Neg Dec for the project

Returned from Dist 2 Board meeting folder.

CALIFORNIA DEPARTMENT OF FISH AND GAME
CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is located in unincorporated Los Angeles County, near Agoura, California, north of the Ventura Freeway (U.S. 101). It is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

FINDING: An initial study has been conducted by the County Sanitation District No. 2 of Los Angeles County in order to evaluate the potential for adverse environmental impact. The District finds that there is no evidence that the proposed project will have any potential for adverse effect on wildlife resources.

CERTIFICATION: I hereby certify that County Sanitation District No. 2 of Los Angeles County has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

Date: _____

_____
Charles W. Carry
Chief Engineer and General Manager
County Sanitation District No. 2 of Los Angeles County

Stamp Copy

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

ENVIRONMENTAL IMPACT ASSESSMENT

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

STAFF DETERMINATION: The District's staff, having undertaken and completed an initial study of this project in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether the proposed project might have a significant effect on the environment, has reached the following conclusion:

(x) 1. The project will not have a significant effect on the environment; therefore, a negative declaration should be prepared.

( ) 2. The project, if modified in accordance with certain mitigation measures set forth in the initial study and enumerated in Exhibit "A" attached hereto and by reference incorporated herein will not have a significant effect on the environment. Upon completion of such procedures as may be necessary to assure such modification, a negative declaration should be prepared.

( ) 3. The project may have a significant effect on the environment; therefore, an EIR will be required.

Date: 7/17/96

Grace R. Chan
Supervising Engineer, Planning Section
Solid Waste Management Department

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

FINAL NEGATIVE DECLARATION

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

FINDINGS: It is hereby found that the above named project will not have a significant effect upon the environment and that there is no evidence that the proposed project will have any potential for adverse effect on wildlife resources. These findings are based upon the independent judgment of County Sanitation District No. 2 of Los Angeles County.

INITIAL STUDY: An initial study of this project was undertaken and prepared in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether this project might have a significant effect on the environment. A copy of such initial study is attached hereto and by reference incorporated herein. Such initial study documents reasons to support the above findings.

MITIGATION MEASURES: None

Date: _____

_____
Charles W. Carry
Chief Engineer and General Manager

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

REVISED INITIAL STUDY

PROJECT TITLE:
Calabasas Landfill Gas Collection System Master Plan - 1996

EXACT LOCATION:
The proposed system will be located at the Calabasas Landfill, 5300 Lost Hills Road, Agoura, California 91301. Exhibits 1 and 2 show the location of the landfill site.

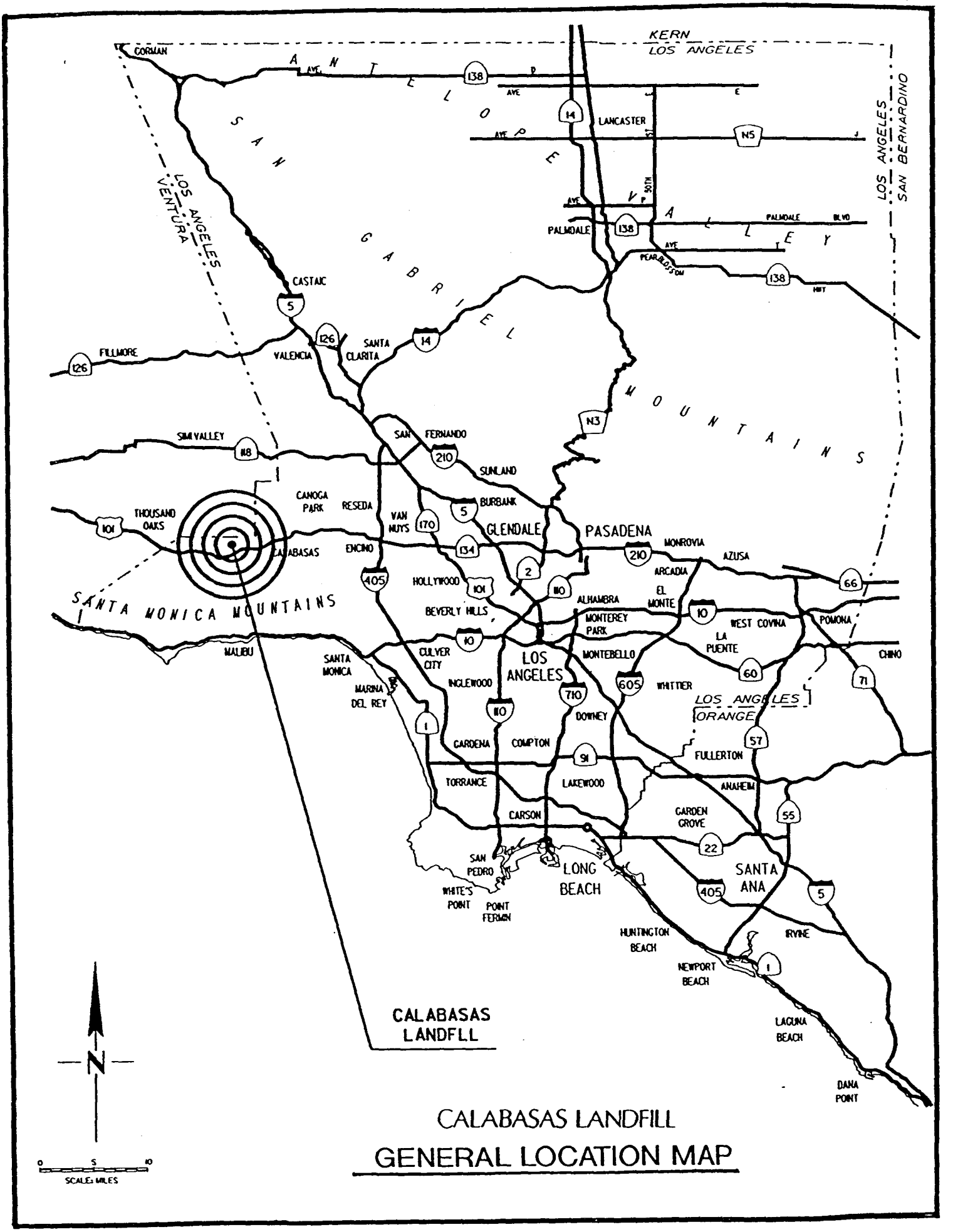
REASON FOR PROJECT:
As an environmental control measure, the landfill gas collection system will be extended into active fill areas over the remaining life of the site (approximately 20 years). Extension of the future gas system will be constructed in compliance with the South Coast Air Quality Management District Rule 1150.1 and Title V (40 CFR 70). Requisite extension of the gas collection system is a routine part of ongoing operations at the site.

DESCRIPTION OF PROJECT:
The proposed project will involve extension of the existing gas collection system into fill areas over the remaining life of the site -- approximately 20 years. The gas collection system master plan will encompass the currently permitted landfill area displayed in Exhibit 3. As areas are filled, the system will be constructed in compliance with the South Coast Air Quality Management District Rule 1150.1. The existing gas system has approximately 509 vertical gas collection wells, 48 horizontal gas collection trenches and 63,000 feet of PVC header lines installed on completed slopes and top deck areas of the active landfill.

In accordance with the Title V (40 CFR 70) permit, the Sanitation Districts of Los Angeles County have prepared the gas collection system plans for the remaining life of the Calabasas Landfill. Construction of gas collection systems are ongoing projects at landfill sites. Under Title V (40 CFR 70), the permitting process will be streamlined into a master plan for approximately 20 years. The Calabasas Landfill Gas Collection System Master Plan proposes 900 additional vertical wells and 165,000 additional linear feet of horizontal trenches to be installed in phased construction over the remaining life of the site. Exhibit 4 depicts the general locations of proposed gas collection wells, collection trenches and lateral lines. A typical construction project could include approximately 80 wells and 12 trenches and last approximately three months. The specific layout of each construction phase will vary depending upon the geometry of the refuse fill existing at the time of construction. Prior to construction, the drawings and construction schedules will be submitted to the South Coast Air Quality Management District.

The proposed work includes the construction of vertical gas collection wells (both pile-driven and auger drilled), horizontal gas collection trenches, an extension to the condensate system, and an above ground piping system which consists of headers and lateral lines for transport of landfill gas to the existing flaring station. The method of auger drilling vertical wells includes the drilling of the well, installation of the well casing, and backfilling with uncrushed gravel and native soil. The construction of horizontal gas collection trenches consists of trench excavation, the installation of corrugated steel piping, and backfilling with uncrushed gravel and native soil. The collected gas will be combusted at the existing flare station.

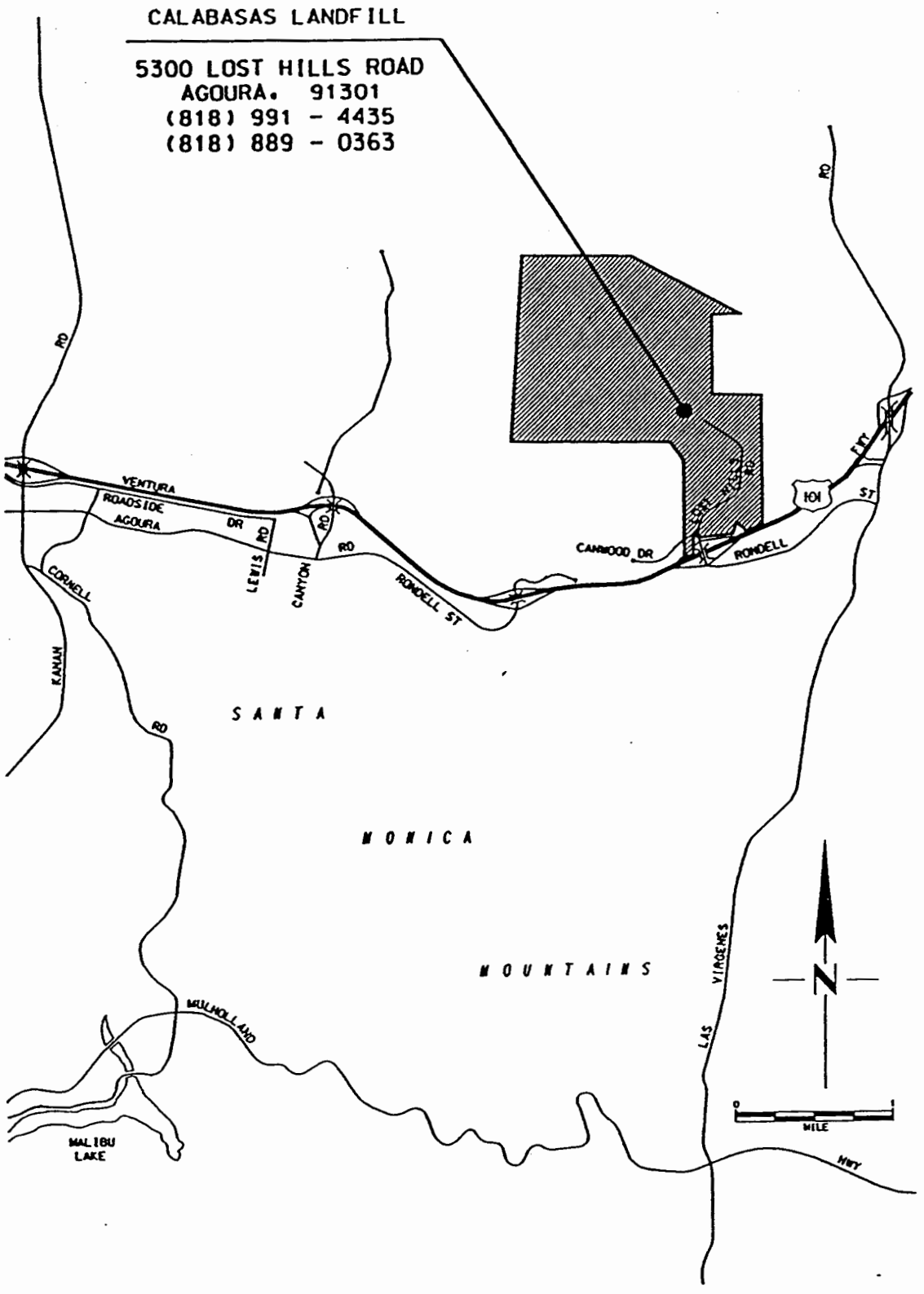
Trenches will be excavated to a depth of approximately 6 feet. Depending on location, the depth of the wells will vary from 40 to 80 feet. Vertical wells will be pile driven in the portion of the existing site where hazardous waste disposal had occurred prior to July 1980. Auger type drilling will take place only



CALABASAS LANDFILL

GENERAL LOCATION MAP

EXHIBIT 1



CALABASAS LANDFILL

VICINITY MAP

EXHIBIT 2

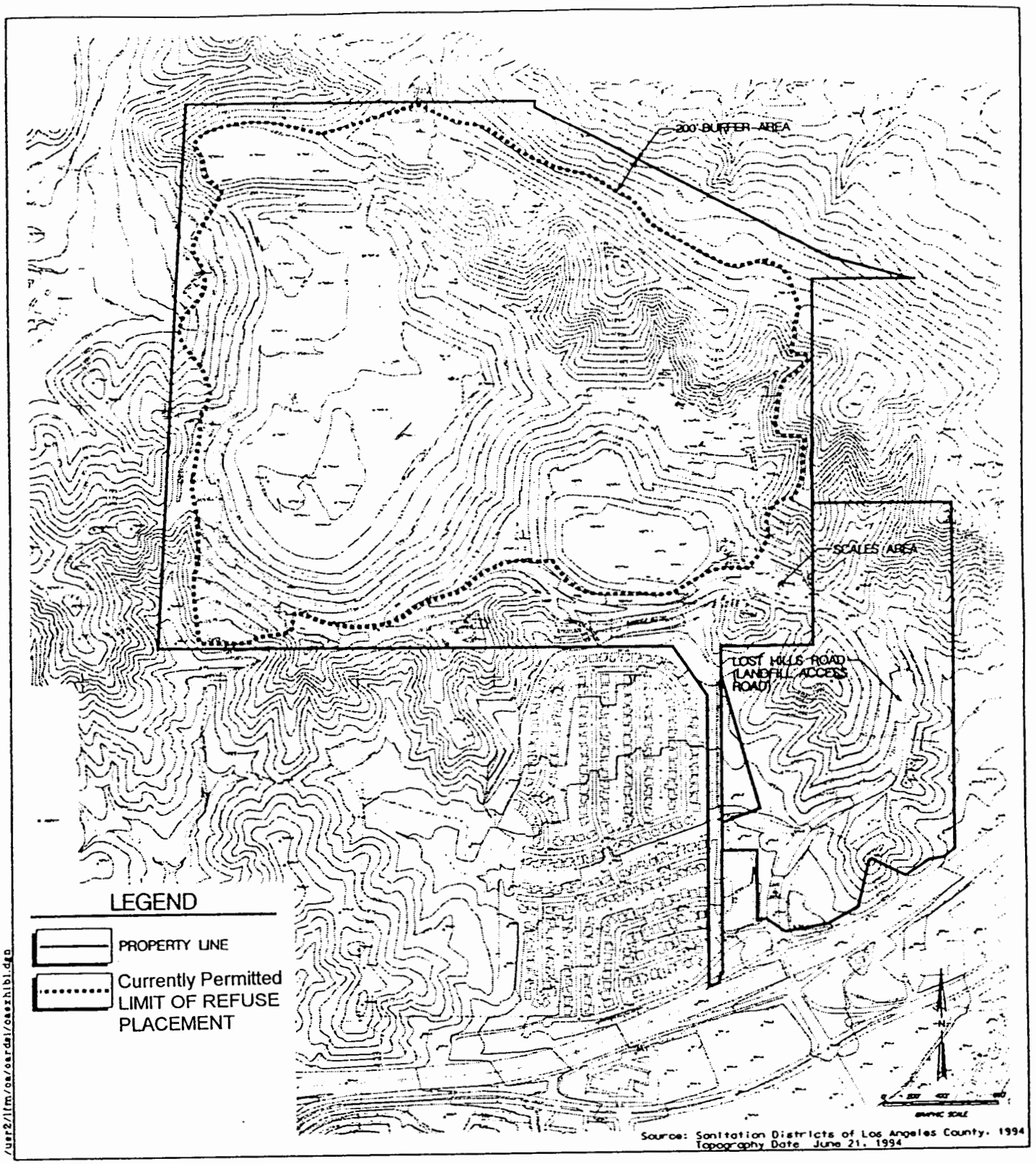


EXHIBIT 3

CALABASAS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

in native soils or existing disposal areas where no hazardous waste was disposed. Horizontal collection trenches will be placed only in areas where no hazardous waste disposal occurred.

The gas control system currently in place consists of vertical gas wells and horizontal gas trenches, piping systems, a condensate collection system, and a flaring station. Prior to constructing the new gas collection wells, the adjoining header lines will be installed, connected to the existing gas system, and placed under vacuum. A gas well cover box will be used during gas well drilling to control potential odors. This box, in conjunction with existing header lines, will be operable (under vacuum) prior to gas well drilling operations. Exposed spoils resulting from drilling and trenching operations, as well as any open trenches and transfer trucks used, will be deodorized. The excavated refuse material will be disposed of on a continuous basis at the working face of the landfill operation.

Dust abatement procedures will be maintained on a continuing basis during all earth moving activities. Potentially hazardous and flammable gas may be present within the construction site as gas extraction wells and gas collection trenches are constructed and connected to the header pipelines. Monitoring equipment will be used to test for the presence of landfill gas and for adequate levels of oxygen. Appropriate corrective action, such as increasing vacuum to the well cover box, will be taken as necessary. No open flames of any kind will be allowed within 50 feet of open trenches.

Installation of the gas wells will occur during normal landfill operating hours. A drilling operation results in noise levels of approximately 89 dBA at 50 feet. Taking into account attenuation over distance, this translates into a noise level of approximately 71 dBA at the closest residence (approximately 500 feet from drilling operations). This noise level will be under the 75 dBA noise level limit for short-term construction activities allowed by the County of Los Angeles Noise Ordinance.

RESPONSIBLE/REVIEWING AGENCIES:

The following agencies will be involved in the review of the project: California Integrated Waste Management Board, County of Los Angeles Department of Health Services, National Park Service/Santa Monica Mountains National Recreation Area and South Coast Air Quality Management District.

ENVIRONMENTAL SETTING OF PROJECT:

The Calabasas Landfill is located within the Santa Monica Mountains in western Los Angeles County, California (refer to Exhibits 1 and 2). The landfill property consists of 505 acres of land. The land to the south has been developed and is known as the Saratoga Hills and Saratoga Ranch subdivisions. The County property is bounded on the east, west and north by rolling hills with moderate elevation differences. These hills are covered with native grasses and sage scrub. Some slopes are sparsely vegetated; scattered trees are present throughout the area.

The Calabasas Landfill began disposal operations in 1961. It currently accepts only non-hazardous municipal solid waste. The operation handles approximately 2,250 tons per day of refuse. Approximately 17.3 million tons of refuse have been placed since the landfill opened. The remaining life of the site is estimated to be approximately 20 years.

COMPATIBILITY WITH ZONING AND PLANNING:

In June 1958, the Sanitation Districts were granted a zone exception by the Los Angeles County Planning Commission to conduct sanitary landfilling operations on a 300-acre parcel constituting the southern portion of the present property. In June 1967, the Regional Planning Commission granted a zone exception to expand landfill operations into an 80-acre parcel in the northwestern portion of the present property. In August 1972, a Conditional Use Permit (CUP) was issued by the Regional Planning Commission to extend landfill operations into a 36.3-acre parcel in the northeast portion of the Districts'

property. The zone exceptions and the CUP provide for activities associated with the landfill operations. The extension of the gas system is consistent with landfilling operations; thus, the project conforms with zoning regulations.

ENERGY USAGE OF THE PROJECT:

During construction, the project will use relatively small quantities of gasoline and/or diesel fuel for drilling and trenching activities. Upon completion of the project, a small amount of electricity will be used to operate the pumping system and blowers.

ENVIRONMENTAL IMPACTS:

Following is a checklist of possible impacts that could be experienced due to the project. Indirect and ultimate results of the project, direct impacts of the project, and secondary effects of the project were considered.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
1. Earth. Will the proposed project result in:				
a. Unstable earth conditions?	☐	☐	☐	☒
b. Changes in geological substructures?	☐	☐	☐	☒
c. Disruptions, displacements, compaction or over covering of the soil?	☐	☐	☒	☐
d. Change in topography or ground surface relief features?	☐	☐	☐	☒
e. The destruction, covering or modification of any unique geologic or physical features?	☐	☐	☐	☒
f. Any increase in wind or water erosion of soils, either on or off the site?	☐	☐	☐	☒
g. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	☐	☐	☐	☒
h. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	☐	☐	☐	☒

Explanation: Auger drilling of wells and trenching operations will take place into refuse and will not cause disruptions to native soil. Soil disruptions resulting from expansion of the blower system and installation of the gas condensate collection system will be temporary.

2. Air. Will the proposed project result in:				
a. Substantial air emissions?	☐	☐	☒	☐
b. Deterioration of ambient air quality?	☐	☐	☐	☒
c. A contribution to an existing or projected air quality violation?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. The creation of objectionable odors?	☐	☐	☒	☐
e. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	☐	☐	☐	☒

Explanation: Potential air emissions will be prevented by routing all collected landfill gas to the flare system where it will be combusted. Gas system extension will not exceed the limits of current South Coast Air Quality Management District permits. Construction related emissions are expected during construction of the project which is expected to occur in phases over a twenty year period. The total emissions due to the operation of trenching equipment, dump trucks, drilling equipment, loader, water truck and other necessary equipment are estimated to be lower than South Coast Air Quality District's CEQA Handbook construction activities threshold limits for air quality impacts. Construction emissions calculations are shown in the Appendix.

3. Water. Will the proposed project result in:

a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	☐	☐	☐	☒
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?	☐	☐	☐	☒
c. Alterations to the course or flow of flood waters?	☐	☐	☐	☒
d. Change in the amount of surface water in any water body?	☐	☐	☐	☒
e. Discharge into surface waters?	☐	☐	☐	☒
f. Alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity?	☐	☐	☐	☒
g. Alteration of the direction or rate of flow of ground waters?	☐	☐	☐	☒
h. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	☐	☐	☐	☒
i. Substantial reduction in the amount of water otherwise available for public water supplies?	☐	☐	☐	☒
j. Exposure of people or property to water related hazards, such as flooding or tidal waves?	☐	☐	☐	☒

Explanation: This project does not involve, address or result in physical change of any surface or ground waters.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Plant Life. Will the proposed projects result in:				
a. Change in the diversity of species, or number of species of any plants (including trees, shrubs, grass, crops, and aquatic plants)?	☐	☐	☐	☒
b. Reduction of the numbers of any unique, rare or endangered species of plants?	☐	☐	☐	☒
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	☐	☐	☐	☒
d. Reduction in acreage of any agricultural crop?	☐	☐	☐	☒

Explanation: This project does not involve, address or result in physical change due to any plant life or any plant habitat.

5. Animal Life. Will the proposed project result in:				
a. Change in the diversity of species, or numbers of species of any birds, land animals, reptiles, fish, shellfish, benthic organisms?	☐	☐	☐	☒
b. Reduction of the numbers of any unique, rare or endangered species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
c. Introduction of new species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
d. Deterioration to, or reduction of, the habitats of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
e. Interfere significantly with the movement of any resident or migratory species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒

Explanation: The proposed project does not involve nor result in physical change to any animal life.

6. Noise. Will the proposed project result in:				
a. Increases in existing noise levels?	☐	☐	☒	☐
b. Exposure of people to severe noise levels?	☐	☐	☐	☒

Explanation: Drilling operations will result in a short term minor increase in existing noise levels. Drilling will occur during normal landfill hours and will be within the allowable noise level set forth by the County of Los Angeles Noise Ordinance for construction activities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Light and Glare. Will the proposed project produce new light or glare?	☐	☐	☐	☒

Explanation: This project does not involve the installation of any lighting equipment.

8. Land Use. Will the proposed project result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
Will the proposed project conflict with:				
a. Adopted environmental plans and goals of the community where it is located?	☐	☐	☐	☒
b. Applicable city or county adopted general plans for the area?	☐	☐	☐	☒

Explanation: This project involves extension of the future gas collection system as new areas of the site are filled. The proposed activities will not result in a change either in the present or planned land use of the project site.

9. Natural Resources. Will the proposed project result in:				
a. Increase in the rate of use of any natural resources?	☐	☐	☐	☒
b. Substantial depletion of any non-renewable natural resource?	☐	☐	☐	☒

Explanation: The proposed project will not involve the use nor causes the destruction of any natural resources. The proposed project is not expected to significantly accelerate the use of natural resources or deplete non-renewable resources.

10. Risk of Accident. Does the proposed project involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	☐	☐	☒	☐

Explanation: During auger drilling of wells, gas well boxes will be under a slight vacuum to draw off any landfill gas that may be released. As an additional precaution, open flames will not be allowed within 50 feet of well and trench installation operations.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Population.				
a. Will the proposed project alter the location distribution, density, or growth rate of the human population of an area?	☐	☐	☐	☒
b. Does the proposed project include capacity for a population greater than that now resident in the project area?	☐	☐	☐	☒

Explanation: The proposed project will not alter the human population density if any manner, including population density, distribution, or growth rate.

12. Housing. Will the proposed project affect existing housing, or create a demand for additional housing?	☐	☐	☐	☒

Explanation: This project does not affect existing housing or create a demand for additional housing, since it will not affect the population in any manner.

13. Transportation/Circulation. Will the proposed project result in:				
a. Generation of substantial additional vehicular movement?	☐	☐	☐	☒
b. Effects on existing parking facilities, or demand for new parking?	☐	☐	☐	☒
c. Substantial impact upon existing transportation systems?	☐	☐	☐	☒
d. Alterations to present patterns of circulation or movement of people and/or goods?	☐	☐	☐	☒
e. Alterations to waterborne, rail or air traffic?	☐	☐	☐	☒
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	☐	☐	☐	☒

Explanation: There may be a temporary increase in vehicular traffic during the construction activities immediately around the project area due to the presence of contractors and heavy equipment. However, the construction activities will not result in any permanent change in traffic flow at the project site. This project will not affect waterborne, rail or air traffic, and the project site prohibits bicyclist and pedestrian traffic due to safety concerns normally associated with landfilling activities.

14. Public Services. Will the proposed project have an effect upon, or result in a need for new or altered governmental services?	☐	☐	☐	☒

Explanation: Because the project will not affect the population density, distribution, or growth in any manner, there will be no need for new or altered governmental services due to this project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Energy. Will the proposed project either result in or encourage:				
a. Use of substantial amounts of fuel or energy?	☐	☐	☐	☒
b. Substantial increase in demand upon existing sources of energy?	☐	☐	☐	☒
c. A requirement for the development of new sources of energy?	☐	☐	☐	☒

Explanation: Relatively small amounts of fuels will be used for drilling and trenching activities associated with this project. The electrical energy usage of the site will increase slightly due to increased demand on the existing pumps and blowers. However, this increase in energy use is not expected to be substantial.

16. Utilities. Will the proposed project result in a need for new systems of, or substantial alterations to, the following utilities:				
a. Power or natural gas?	☐	☐	☐	☒
b. Communications systems?	☐	☐	☐	☒
c. Water?	☐	☐	☐	☒
d. Sewer or septic tanks?	☐	☐	☐	☒
e. Storm water drainage?	☐	☐	☐	☒
f. Solid waste and disposal?	☐	☐	☐	☒

Explanation: Because the proposed project will not affect the population density, distribution, or growth in any manner, no alteration in the demand for utilities is anticipated.

17. Human Health. Will the proposed project result in:				
a. Creation of any health hazard or potential health hazard (excluding mental health)?	☐	☐	☐	☒
b. Exposure of people to potential health hazards?	☐	☐	☐	☒

Explanation: If necessary, the Contractor will provide and operate a suitable blower of sufficient capacity to maintain the air within the work area in a condition such that concentration of methane gas is within acceptable limits. Gas well cover box assemblies will be used to control the majority of the decomposition gas released from the landfill during gas well auger drilling.

18. Aesthetics. Will the proposed project result in:				
a. The obstruction of any scenic vista or view open to the public?	☐	☐	☐	☒
b. The creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. The destruction of a stand of trees, a rock outcropping or other locally recognized desirable aesthetic natural features?	☐	☐	☐	☒

Explanation: The proposed trenching and drilling activities will not result in an obstruction of a scenic vista or view, nor will they create an aesthetically offensive site.

19. Recreation. Will the proposed project result in an impact upon the quality or quantity of existing recreational opportunities?	☐	☐	☐	☒

Explanation: The proposed project does not involve, address, nor result in any effect on existing recreational opportunities.

20. Archaeological/Historical. Will the proposed project result in an alteration of a significant archaeological, historical, paleontological or cultural site, structure, object or building?	☐	☐	☐	☒

Explanation: The proposed project will not affect a significant archeological, historical, paleontological or cultural site, structure, object or building in any manner.

21. Mandatory Findings or Significance.

a. Does the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b. Does the proposed project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☒
c. Does the proposed project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant)?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Does the proposed project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

MITIGATION MEASURES: Analysis of environmental effects of the project using the checklist identified several areas where the project would have minor effects; however, no significant environmental effects were determined. The list of significant effects (Appendix G in State Guidelines) was also reviewed and none of the significant effects was found to be associated with the project.

PUBLIC CONTROVERSY: There is no public controversy concerning any environmental effects of the project.

Date: 8-27-96

Donald S. Nellor
Planning Section Head
Solid Waste Management Department

ATTACHMENT A

Construction Emissions

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

VERTICAL GAS COLLECTION WELLS - 900 TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System
(per well installation)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Crane Unit (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Auger Drill (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Wheeled Loader (2)	Diesel	4 hrs	0.572 lb/hr	2.288	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Cement Mixer (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Water Truck (3)	Diesel	40 mi	37.71 gm/mi	3.33	7.05 gm/mi	0.62	21.9 gm/mi	1.93	0.56 gm/mi	0.05	3.17 gm/mi	0.28
Dump Truck (3)	Diesel	40 mi	37.71 gm/mi	3.33	7.05 gm/mi	0.62	21.9 gm/mi	1.93	0.56 gm/mi	0.05	3.17 gm/mi	0.28
Pick-up Truck (3)	Gasoline	16 mi	26.21 gm/mi	0.92	2.33 gm/mi	0.08	1.53 gm/mi	0.05	0.045 gm/mi	0.00	0.21 gm/mi	0.01
Air (1) Compressor	Gasoline	4 hrs	12.6 lb/hr	50.4	0.421 lb/hr	1.684	0.326 lb/hr	1.304	0.017 lb/hr	0.068	0.021 lb/hr	0.084
Electric Generator (1)	Gasoline	1 hrs	12.6 lb/hr	12.6	0.421 lb/hr	0.421	0.326 lb/hr	0.326	0.017 lb/hr	0.017	0.021 lb/hr	0.021
Total (per well) lbs				78.07		5.99		37.71		2.31		2.91
Total (all wells)				70264		5392		33936		2082		2620

Notes:

(1) Emission factors obtained from EPA-AP42, 1985, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment".

(2) Emission factors obtained from EPA AP-42, 1992, Table II-7.1, "Emission Factors for heavy duty diesel powered construction equipment.

(3) Emission factors obtained from ARB EMFAC7F and E7F for LA Co., 1994, Traveling speed was assumed to be 5 mph.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

HEADER LINE INSTALLATION AND PAINTING - 75,000 FEET TOTAL
Information based upon total emissions calculated for Calabasas 1995 Gas Collection System
(per 1000 ft header line)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Loader (1)	Diesel	17 hrs	0.572 lb/hr	9.724	0.25 lb/hr	4.25	1.89 lb/hr	32.13	0.182 lb/hr	3.094	0.172 lb/hr	2.924
Air (2) Compressor	Diesel	17 hrs	0.434 lb/hr	7.378	0.16 lb/hr	2.72	2.01 lb/hr	34.17	0.133 lb/hr	2.261	0.143 lb/hr	2.431
Water Truck (3)	Diesel	42 mi	37.71 gm/mi	3.49	7.05 gm/mi	0.65	21.9 gm/mi	2.03	0.56 gm/mi	0.05	3.17 gm/mi	0.29
Pick-up Truck (3)	Gasoline	66 mi	26.21 gm/mi	3.81	2.33 gm/mi	0.34	1.53 gm/mi	0.22	0.045 gm/mi	0.01	0.21 gm/mi	0.03
Dump Truck (3)	Diesel	85 mi	37.71 gm/mi	7.07	7.05 gm/mi	1.32	21.9 gm/mi	4.10	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Delivery Trucks (3)	Diesel	6 mi	37.71 gm/mi	0.50	7.05 gm/mi	0.09	21.9 gm/mi	0.29	0.56 gm/mi	0.01	3.17 gm/mi	0.04
Air (2) Compressor	Gasoline	8 hrs	12.6 lb/hr	100.8	0.421 lb/hr	3.368	0.326 lb/hr	2.608	0.017 lb/hr	0.136	0.021 lb/hr	0.168
Pick-up Truck (3)	Gasoline	66 mi	26.21 gm/mi	3.81	2.33 gm/mi	0.34	1.53 gm/mi	0.22	0.045 gm/mi	0.01	0.21 gm/mi	0.03
Total (per 1000 ft of header)	lbs			136.59		13.06		75.77		5.67		6.51
Total (all header)				10244		981		5683		425		489

Notes:
(1) Emission factors obtained from EPA AP-42, 1992, Table II-7.1, "Emission Factors for Heavy-Duty, Diesel-Powered Construction Equipment".
(2) Emission factors obtained from EPA AP-42, 1985, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment".
(3) Emission factors obatained from EMFAC7F and E7F for LA Co., 1994. Traveling speed was assumed to be 5 mph.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TRENCH INSTALLATION - 165,000 FEET TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System

(per 1000 ft trench)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Loader (1)	Diesel	16 hrs	0.572 lb/hr	9.15	0.25 lb/hr	4	1.89 lb/hr	30.24	0.182 lb/hr	2.91	0.172 lb/hr	2.75
Excavator (1)	Diesel	16 hrs	0.572 lb/hr	9.15	0.25 lb/hr	4	1.89 lb/hr	30.24	0.182 lb/hr	2.91	0.172 lb/hr	2.75
Dump Truck (dirt) (2)	Diesel	84 mi	37.71 gm/mi	6.98	7.05 gm/mi	1.31	21.9 gm/mi	4.06	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Dump Truck (gravel) (2)	Diesel	84 mi	37.71 gm/mi	6.98	7.05 gm/mi	1.31	21.9 gm/mi	4.06	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Water Truck (2)	Diesel	80 mi	37.71 gm/mi	6.65	7.05 gm/mi	1.24	21.9 gm/mi	3.86	0.56 gm/mi	0.10	3.17 gm/mi	0.56
Delivery Trucks (2)	Diesel	10 mi	37.71 gm/mi	0.83	7.05 gm/mi	0.16	21.9 gm/mi	0.48	0.56 gm/mi	0.01	3.17 gm/mi	0.07
Forklift (1)	Diesel	8 hrs	0.572 lb/hr	4.58	0.25 lb/hr	2	1.89 lb/hr	15.12	0.182 lb/hr	1.46	0.172 lb/hr	1.38
Pick-up Trucks (2)	Gasoline	84 mi	26.21 gm/mi	4.85	2.33 gm/mi	0.43	1.53 gm/mi	0.28	0.045 gm/mi	0.01	0.21 gm/mi	0.04
Total (per 1000 ft. trench)				49.18		14.44		88.34		7.61		6.72
Total (all trench)				8115		2383		14576		1255		1439

Notes:

(1) Emission factors obtained from EPA AP-423, 1992, Table II-7.1, "Emission Factors for Heavy-Duty, Diesel Powered Construction Equipment".

(2) Emission Factors obtained from ARB EMFAC7F and E7F for LA Co., 1994. Traveling speed was assumed to be 5 mph.

Total Construction Emissions (lbs)

CO	ROG	NOx	SOx	PM
88623	8756	54195	3762	4548

Total Construction Emissions (tons)

CO	ROG	NOx	SOx	PM
44.3	4.4	27.1	1.9	2.3

Additional PM Emissions (tons)
(Trench excavation material, unpaved road travel)

PM
21.2

This gas collection system plan should cover the remaining fill life of the Calabasas Landfill which should last approximately another 20 yrs.
Therefore, the construction emission impacts per quarter until completion are:

	CO	ROG	NOx	SOx	PM	
Masterplan Project	0.6	0.05	0.3	0.02	0.29	tons
Emission Thresholds,SCAB(1)	24.75	2.5	2.5	6.75	6.75	tons

(1) South Coast Air Basin (SCAB) specified thresholds, 1993 CEQA Air Quality Handbook, South Coast Air Quality Management District.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

PM10 EMISSIONS

Trench excavation - 165,000 ft. total

Emission factors from Table A9-9, SCAQMD Guidelines for Preparing CEQA.

Activity	Emission Factor	Units	Activity Amount	Units	PM Emissions (lbs)
Storage pile filling	0.009075	lb/ton dirt	148500	tons	1347.638
Truck filling	0.02205	lb/ton dirt	148500	tons	3274.425
Total PM Emissions					4622

Unpaved Road Travel Emissions

Emission factors from Table A9-9-D, SCAQMD Guidelines for Preparing CEQA

F= 2.1 x (G/12) x (H/30) x [(I/3)^0.7] x [(J/4)^0.5] x [(365-K)/365]

assume all road travel is on unpaved surfaces

Equipment Type	G	H	I	J	K(1)	F	VMT	E
Pick-up trucks	12	15	2	4	313	0.112625	33210	3740
Water trucks	12	15	5	6	313	0.261963	52350	13714
Dump trucks	12	15	5	6	313	0.261963	70095	18362
Delivery Trucks	12	15	15	18	313	0.979005	2100	2056
Total PM Emissions								37872

Notes:
(1) K is the number of days of precipitation. Because all travelled areas at the landfill are watered, this value is 313 days.

Total Additional PM Emissions

42494 lbs

21.2 tons

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Vertical wells (900 wells total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Crane Unit	3600 hrs	9 gal/hr	32400	7.5 lb/1000 gal	243.0	2.67	3.2	229
Auger Drill	3600 hrs	7 gal/hr	25200	7.5 lb/1000 gal	189.0	2.08	3.2	178
Wheeled Loader	3600 hrs	3.2 gal/hr	11520	43.2 lb/1000 gal	497.7	5.47	1.8	46
Cement Mixer	3600 hrs	1 gal/hr	3600	7.5 lb/1000 gal	27.0	0.30	3.2	25
Water Truck	36000 mi	7 mi/gal	5143	7.05 gm/mi (4)	559.5	6.15	0.55	6
Dump Truck	36000 mi	7 mi/gal	5143	7.05 gm/mi (4)	559.5	6.15	0.55	6

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Air Compressor (6)	3600 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Elec. Generator (6)	900 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pick-up Truck (5)	14400 mi	10 mi/gal	1440	2.33 gm/mi	74.0	0.81	0.64	2.03
Total Toxics Emissions						23.65		492

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

(6) Toxic air pollutant emission factors are not available for these stationary IC engines.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Header line (75,000 feet total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Wheeled loader	1275 hrs	3.2 gal/hr	4080	43.2 lb/1000 gal	176.3	1.94	1.8	16.19
Air Compressor (5)	1275 hrs	3.1 gal/hr	3953	37.5 lb/1000 gal	148.2	1.63	0.782	6.81
Water truck	3150 mi	7 mi/gal	450	7.05 gm/mi (4)	49.0	0.54	0.55	0.55
Dump truck	6375 mi	7 mi/gal	911	7.05 gm/mi (4)	99.1	1.09	0.55	1.10
Delivery trucks	450 mi	5 mi/gal	90	7.05 gm/mi (4)	7.0	0.08	0.55	0.11

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Pick-up trucks (6)	4950 mi	10 mi/gal	495	2.33 gm/mi	25.43	0.28	0.64	0.70
Air compressor (7)	600 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total						5.55		25.5

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Benzene emission factors based on hydrocarbon emissions from EPA AP-42, Table 3.3-1, Formaldehyde emission factors obtained from SCAQMD Table 2, as included in the 1992 ATIR.

(6) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

(7) Toxic air pollutant emission factors are not available for these stationary IC engines.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Trench Installation (165,000 feet total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Wheeled Loader	2640 hrs	3.2 gal/hr	8448	43.2 lb/1000gal	365.0	4.01	1.8	33.52
Excavator	2640 hrs	3.2 gal/hr	8448	43.2 lb/1000gal	365.0	4.01	1.8	33.52
Forklift	1320 hrs	3.2 gal/hr	4224	43.2 lb/1000gal	182.5	2.01	1.8	16.76
Water truck	13200 mi	7 mi/gal	1885.7	7.05 gm/mi (4)	205.2	2.26	0.55	2.29
Dump truck	27720 mi	7 mi/gal	3960.0	7.05 gm/mi (4)	430.8	4.74	0.55	4.80
Delivery trucks	1650 mi	7 mi/gal	235.7	7.05 gm/mi (4)	25.6	0.28	0.55	0.29

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Pick-up trucks (5)	13860 mi	10 mi/gal	1386	2.33 gm/mi	71.19	0.78	0.64	1.96
Total						18.10		93.14

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

TOTAL TOXIC EMISSIONS FROM CONSTRUCTION:

BENZENE	FORMALDEHYDE	
47.30	610.56	lbs

The annual toxic emissions from construction of this project are compared to the annual emissions form the Scholl Canyon Landfill, as reported in the December 1991, Scholl Canyon Landfill Health Risk Assessment. No such data is available for the Calabasas Landfill because an HRA was not required for this site. As can be seen in the table below, the annual emissions for Scholl Canyon resulted in exposure levels considerable lower than the Exposure Guidelines. Therefore, it is reasonable to predict that the emissions form construction of the master plan (over approximately 20 years), will also result in exposure levels below the Guidelines.

Pollutant	Emissions Reported in HRA		Exposure Guideline (ug/m^3)	Plan Emissions (lb/yr) (1)
	lb/yr	Chronic Exposure (ug/m^3)		
Benzene	149	0.41	71	2.36
Formaldehyde	1118	3.06	3.6	30.53

(1) emissions are based upon total emissions from table above divided by 20 years remaining fill life.

COMMENTS

State of California

California Environmental Protection Agency

AUG

MEMORANDUM

To: Chris Belsky
State Clearinghouse
1400 10th Street
Sacramento, CA 95814

Date: August 6, 1996

June Nguyen
Los Angeles County Sanitation District
1955 Workman Road
Whittier, CA 90601

From: Jeannie H. Blakeslee
Environmental Review Section
Permits Branch
Permitting and Enforcement Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH# 96071071 - Proposed Negative Declaration for the Calabasas Landfill Gas Collection System Master Plan, Los Angeles County (SWIS# 19-AA-0056)

Staff of the California Integrated Waste Management Board (CIWMB) have reviewed the proposed negative declaration (ND) for the project cited above. The proposed project is an extension of the existing landfill gas control system at the Calabasas Landfill. The Calabasas Landfill Gas Collection System Master Plan proposes phased installation of 900 additional vertical wells, 165,000 linear feet of horizontal trenches, an extension to the condensate system, an above-ground piping system consisting of headers, and 75,000 feet of lateral lines for transport of landfill gas to the existing flaring station.

Staff offer the following comments pertaining to the ND:

Apparently the specific layout of each phase has not yet been determined, and will depend on the geometry of the refuse. Since the total footage of gas collection wells, collection trenches, and lateral lines is known, the general configuration of the landfill gas control system should be also be known. Staff suggest that a schematic or diagram indicating the general locations of these components be

included in the ND, and we ask that a copy be sent to us for our records. As the project is implemented, the locations of the wells, trenches and lateral lines should be incorporated into the Report of Disposal Site Information.

As this project progresses, we ask that the Los Angeles County Local Enforcement Agency be kept informed.

Thank you for the opportunity to review this document. Please contact me at (916) 255-4708 if your have any questions.

cc: Connie Rocke, LEA
Grace Chan, Los Angeles County Sanitation District

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, 120 SO. SPRING ST.
LOS ANGELES, CA 90012-3606

IGR/CEQA/ND
L. A. County Sanitation
District #2
CALABASAS LANDFILL GAS
COLLECTION SYSTEM
MASTER PLAN - 1996
SCH #96071071 (7045)
LA-101-31.85

July 25, 1996

8-16-96
C

Ms. June Nguyen
Los Angeles County
Sanitation District #2
1955 Workman Mill Road
Whittier, CA 90601

Dear Ms. Nguyen:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced document. This is a proposal to construct vertical gas collection wells, horizontal gas collection trenches, above ground piping system for transport of lateral lines to an existing flaring station, and to extend the condensate system.

We have no comment, however, please be aware that any transport of heavy construction equipment which requires the use of oversize transport vehicles on State Highways will require a Caltrans transportation permit. We recommend that large size trucks which are transporting construction materials and equipment be limited to off-peak commute periods.

If you have any questions regarding this response, please call me at (213) 897-4429.

Sincerely,

original signed by

Steve Buswell
IGR/CEQA Coordinator

cc: CBelsky, State Clearinghouse

bcc: RHelgeson, HQ Transportation Planning/IGR
chrono
mv/7045

RESPONSE TO COMMENTS

Response to Comments from California Integrated Waste Management Board:

In response to the California Integrated Waste Management Board's suggestion, the initial study has been revised to include a drawing indicating the general locations of proposed gas collection wells, collection trenches and lateral lines. As the project is implemented, the locations of the wells, trenches and lateral lines will be incorporated into the Report of Disposal Site Information.

A copy of the Final Negative Declaration will be sent to the California Integrated Waste Management Board as requested.

Response to Comments from California Department of Transportation:

The comments received were general in nature and have been noted. They do not require any response.

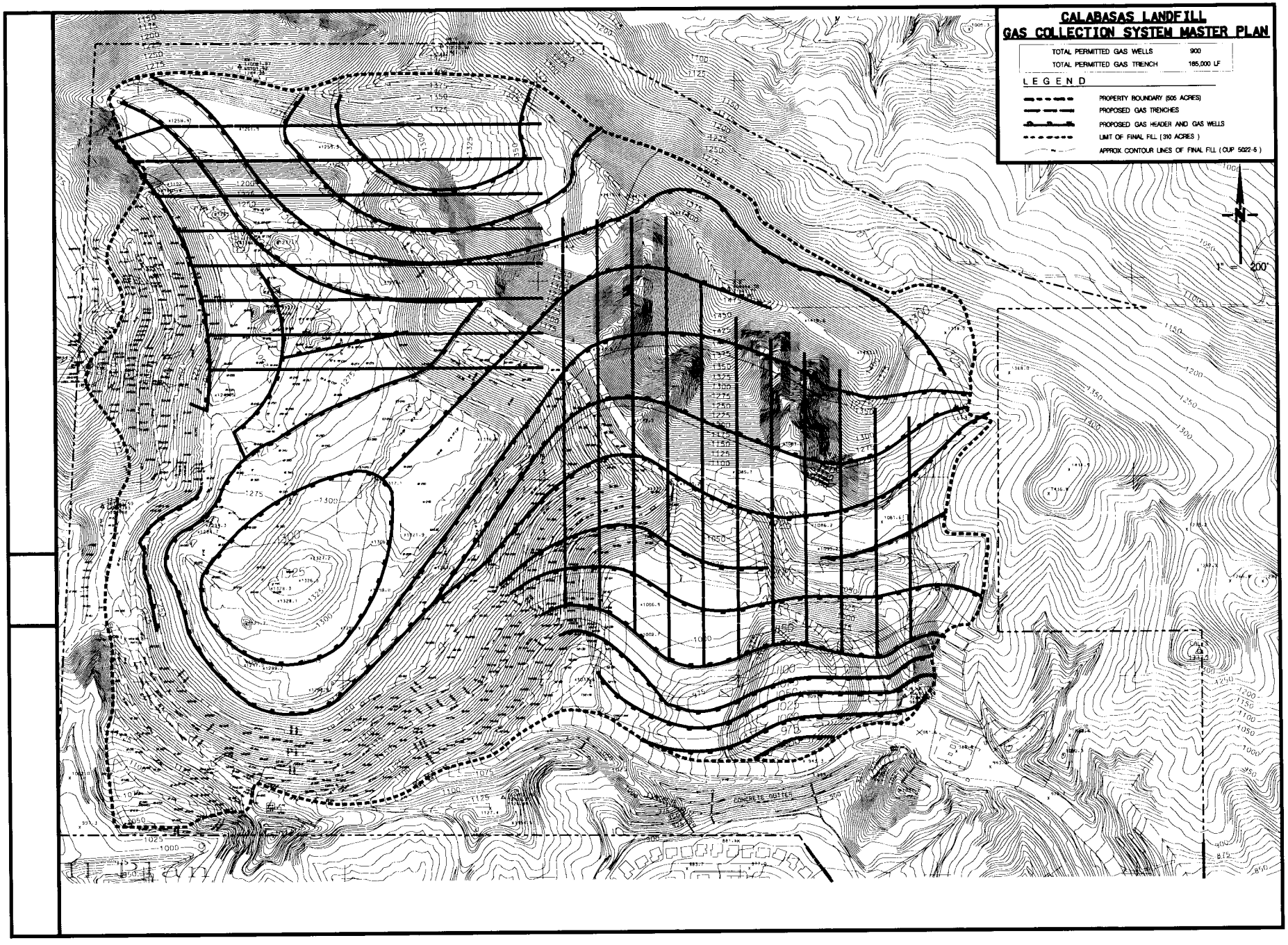


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Exhibit 4

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
REQUISITION

questor: Loc: JAF2-RDHO Requisition No: 234947

A P P R O V A L S

sistant
ief Engineer : _____ Init: Date:

partment Head: _____ Init: Date:

ction Head : _____ Init: Date:

rchasing : _____ Init: Date:

quisition Date: Reprint: PO Date: PO No:
rchase Type: Purchase Code:
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SOLID WASTE DEPARTMENT
1955 WORKMAN MILL RD.
WHITTIER
CA
90601
Attn: June Nguyen

yer: Contact Name: Ginger Contact Phone: 213-229-5500
rms Code/Description:
livery: FOB: VIA:

Ln No	Quantity Ordered	Unit	Item Number	Price Per Unit	Discount Cash|Trade	Extension	Tax Rate
			Item Description				
01	01950 037 classified		Advertisement classified : Calabasas Landfill negative declaration	@ $2016.84			.0825

TRANSMITTAL

County Sanitation Districts
of Los Angeles County

DATE: May 7, 1996

TO: Chandra Taylor-Hodge

OF: Air Quality Group, Solid Waste Management

FROM: Max Kroschel

SUBJECT: Calabasas Landfill Gas Collection System Master Plan, Title 5 Permit

ENCLOSED:

2 blueline copies of Calabasas Landfill Gas Control System Master Plan

COMMENTS: Cost Estimates in 1995 dollars:

Calabasas Landfill Gas Control System

900 gas wells	@ $5,500	$ 4,950,000
150,000 lf gas trench	@ $55/lf	$ 9,075,000
75,000 lf gas header	@ $45/lf	$ 3,375,000
jack pipe for LCRS underdrain		$ 500,000
LCRS Pump Sta.No.2 at Barrier #6		$ 550,000
	Total	$18,450,000

Spadra Landfill Gas Control System

250 gas wells	@ $5,500	$ 1,375,000
20,000 lf gas trench	@ $55/lf	$ 1,100,000
50 gas probes	@ $1,750	$ 88,000
5,000 lf paintimg	@ $10/lf	$ 50,000
17,000 lf gas header	@ $45/lf	$ 765,000
	Total	$ 3,378,000

7-15
June - Designs Proj. Costs CN

WASTEWATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANIT (GRACE- OF LC

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (310) 699-7411, FAX: (310) 695-6139

7.16.96

PER YOUR REQUEST

May 15, 1
File: 31R

Charlotte

Mr. William Thompson
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Dear Mr. Thompson:

Applications for Permits to Construct/Operate
Landfill Gas Collection Systems - Master Plans
Calabasas and Spadra Landfills

In preparation for permitting under the Title V program, the Sanitation Districts of Los Angeles County have prepared gas collection system plans for the remaining fill life of the Calabasas (ID# 042514) and Spadra (ID# 042633) Landfills. Although the plans are considered master plans for the site, they are not the final, definitive design for all future gas collection systems. These plans include conservative designs for vertical well and horizontal trench spacing, but the design of each individual gas project may vary depending on the geometry of the fill cut where the gas system is constructed. Our in-house policies concerning gas collection system projects will continue, and projects will be constructed as they are deemed necessary with landfilling activities. When a new phase or set of wells (project) is scheduled for construction at either of these sites, drawings and a construction schedule will be submitted to the SCAQMD at least seven days prior to the start of construction.

Calabasas Landfill

At the Calabasas Landfill, not all items were installed under the current gas collection system permit A/N 305485. Approximately 6,900 additional linear feet of trench are planned for installation during the month of May 1996. SCAQMD will be notified within one week of their construction. All remaining items are included in the master plan. The equipment existing at the Calabasas Landfill (including the trenches planned for May) are:

1. Two hundred seventy four (274) vertical landfill gas collection wells, auger drilled, and associated header and lateral piping.

2. Two hundred thirty three (233) vertical landfill gas collection wells, pile driven, and associated header and lateral piping.

3. Forty two (42) horizontal gas collection trenches, various diameters, and associated header and lateral piping .

The master plan for Calabasas will include the overall addition of:

1. Nine hundred (900) vertical landfill gas collection wells, auger drilled or pile driven, and associated header and lateral piping.

2. One hundred sixty five thousand (165,000) linear feet horizontal gas collection trenches either peripheral or parallel style, and associated header and lateral piping.

Spadra Landfill

The active application for the gas collection system at the Spadra Landfill is A/N 306156, and that permit will be modified to include the master plan equipment. In addition, per our Memorandum of Understanding with you, landfill gas condensate strippers will also be included in the gas collection system permit. Separate permit applications are included in this package for the landfill gas condensate/leachate storage and collection system and for a modification to the air stripping system permit which originally included the condensate strippers. Including the equipment installed under A/N 306156 and the condensate air stripping towers, the equipment existing at the Spadra Landfill are:

1. Two hundred fifty (250) vertical landfill gas collection wells, and associated header and lateral piping.

2. Fifty four (54) horizontal landfill gas collection trenches, (approximately 38,300 linear feet), and associated header and lateral piping.

3. Two (2) air stripping towers, condensate.

The master plan for Spadra will include the overall addition of:

1. Two hundred fifty (250) vertical gas collection wells, and associated header and lateral piping.

2. Twenty thousand (20,000) linear feet horizontal landfill gas collection trench, and associated header and lateral piping.

3. Up to two (2) additional liquids stripping towers.

The equipment included in the condensate/leachate collection and storage system at Spadra are as follows:

1. Two (2) storage tanks, condensate influent, each 6400 gallon capacity.

2. Two (2) storage tanks, condensate, each 6400 gallon capacity.

3. One (1) storage tank, condensate, 5000 gallon capacity.

4. Two (2) storage tanks, condensate, each 1050 gallon capacity.

5. Two (2) storage tanks, leachate, each 1500 gallon capacity.

6. One (1) storage tank, condensate, 1600 gallon capacity.

7. One (1) storage tank, emergency, condensate, 1100 gallon capacity.

Because the condensate strippers and storage tanks will be included on separate permits, it is necessary to modify the equipment description on the existing air stripping permit at Spadra (A/N 286985). That equipment description should have all of the condensate treatment items removed and the remaining items in the system will read as follows:

LANDFILL ~~GAS CONDENSATE AND~~ CANYON WATER TREATMENT SYSTEM CONSISTING OF:

1. ~~FOUR~~ TWO STORAGE TANKS, ~~CONDENSATE OR~~ CANYON WATER, EACH 6500 GAL. CAPACITY WITH ASSOCIATED PUMPS.

2. STRIPPING TOWER, CANYON WATER, 40 GPM, 1'-7" DIA. X 27'-0" H. WITH ASSOCIATED PUMPS AND BLOWERS.

Enclosed, please find two checks totalling $7,247.95 which cover the application fees for modifications to the gas collection system at Calabasas and the modifications to the gas collection system, the air stripping system and the permit processing fee for the condensate/leachate collection and storage system at Spadra. Also enclosed are two copies of the overall master plan drawing for each landfill. The appropriate CEQA documentation for the Calabasas Landfill gas collection system is currently being prepared. An approved copy will be forwarded to you as soon as it is available. We understand that a final copy of a permit cannot be issued until you have received an approved CEQA document. The Spadra gas collection system construction is covered by the Environmental Impact Report prepared and approved in 1985. A master plan is still under design for the Scholl Canyon Landfill; that plan and permit application will be forwarded to you as soon as it is available.

If you have any questions concerning this application, please contact the undersigned at the telephone number listed above.

Very truly yours,

Charles W. Carry

Frank R. Caponi

Frank R. Caponi
Supervising Engineer
Solid Waste Management Department

FRC:CTH:eo
Enclosures

ORIGINAL DOCUMENT HAS A REFLECTIVE WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW WHEN CHECKING THE ENDORSEMENT.

COUNTY OF LOS ANGELES

T1286742

PAYABLE THROUGH:
FIRST INTERSTATE BANK OF CALIFORNIA
707 WILSHIRE BLVD.
LOS ANGELES CA 90017

AUDITOR CONTROLLER'S SPECIAL WARRANT
WARRANT CLEARANCE FUND • LOS ANGELES, CALIFORNIA

THE TREASURER OF THE COUNTY OF LOS ANGELES
WILL PAY TO THE ORDER OF:

NOT PAYABLE AFTER TWO YEARS FROM DATE ISSUED 16-21/1220

SOUTH COAST AIR QUALITY MGT DIS*
LC 955 P O BOX 4943
DIAMOND BAR CA 91765

ISSUE DATE 040896 WARRANT NO. 1286742

0015698

04080905

DOLLARS	CENTS
$**4197	78

APPROVED

*****FOUR THOUSAND ONE HUNDRED NINETY SEVEN AND 78/100 DOLLARS

ALAN T. SASAKI AUDITOR-CONTROLLER
BY

FRAUD PROTECTION: PATENTS 4,210,346; 4,227,720; 4,310,180; 5,197,765; 5,340,159

⑈1286742⑈ ⑆122000218⑆ 14959830⑆⑈ 11

ORIGINAL DOCUMENT HAS A REFLECTIVE WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW WHEN CHECKING THE ENDORSEMENT.

COUNTY OF LOS ANGELES

T1003528

PAYABLE THROUGH:
FIRST INTERSTATE BANK OF CALIFORNIA
707 WILSHIRE BLVD.
LOS ANGELES CA 90017

AUDITOR CONTROLLER'S SPECIAL WARRANT
WARRANT CLEARANCE FUND • LOS ANGELES, CALIFORNIA

THE TREASURER OF THE COUNTY OF LOS ANGELES
WILL PAY TO THE ORDER OF:

NOT PAYABLE AFTER TWO YEARS FROM DATE ISSUED 16-21/1220

SANITATION SOUTH COAST AIR QUALITY MGT DIST
LC 955 P O BOX 4943
DIAMOND,BAR, CA 91765

ISSUE DATE 050396 WARRANT NO. 1003528

REQ#15776

DOLLARS	CENTS
$3,050	17

APPROVED

ALAN T. SASAKI AUDITOR-CONTROLLER
BY

FRAUD PROTECTION: PATENTS 4,210,346; 4,227,720; 4,310,180; 5,197,765; 5,340,159

⑈1003528⑈ ⑆122000218⑆ 14959830⑆⑈ 11

31R-106.10

State of California

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO 95814

PETE WILSON
GOVERNOR

LEE GRISSOM
DIRECTOR

August 16, 1996

JUNE NGUYEN
L.A. COUNTY SANITATION DISTRICT NO. 2
1955 WORKMAN MILL ROAD
WHITTIER, CA 90601

Subject: CALABASAS LANDFILL GAS COLLECTION SYSTEM MASTER PLAN-1996 SCH #: 96071071

Dear JUNE NGUYEN:

The State Clearinghouse has submitted the above named proposed Negative Declaration to selected state agencies for review. The review period is now closed and the comments from the responding agency(ies) is(are) enclosed. On the enclosed Notice of Completion form you will note that the Clearinghouse has checked the agencies that have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the comment package is not in order, please notify the State Clearinghouse immediately. Remember to refer to the project's eight-digit State Clearinghouse number so that we may respond promptly.

Please note that Section 21104 of the California Public Resources Code required that:

> "a responsible agency or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency."

Commenting agencies are also required by this section to support their comments with specific documentation.

These comments are forwarded for your use in preparing your final EIR. Should you need more information or clarification, we recommend that you contact the commenting agency at your earliest convenience.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

ANTERO A. RIVASPLATA
Chief, State Clearinghouse

Enclosures
cc: Resources Agency

34

P. CLARKE

State of California

California Environmental Protection Agency

AUG

MEMORANDUM

To: Chris Belsky
State Clearinghouse
1400 10th Street
Sacramento, CA 95814

Date: August 6, 1996

June Nguyen
Los Angeles County Sanitation District
1955 Workman Road
Whittier, CA 90601

From: Jeannie H. Blakeslee
Environmental Review Section
Permits Branch
Permitting and Enforcement Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH# 96071071 - Proposed Negative Declaration for the Calabasas Landfill Gas Collection System Master Plan, Los Angeles County (SWIS# 19-AA-0056)

Staff of the California Integrated Waste Management Board (CIWMB) have reviewed the proposed negative declaration (ND) for the project cited above. The proposed project is an extension of the existing landfill gas control system at the Calabasas Landfill. The Calabasas Landfill Gas Collection System Master Plan proposes phased installation of 900 additional vertical wells, 165,000 linear feet of horizontal trenches, an extension to the condensate system, an above-ground piping system consisting of headers, and 75,000 feet of lateral lines for transport of landfill gas to the existing flaring station.

Staff offer the following comments pertaining to the ND:

Apparently the specific layout of each phase has not yet been determined, and will depend on the geometry of the refuse. Since the total footage of gas collection wells, collection trenches, and lateral lines is known, the general configuration of the landfill gas control system should be also be known. Staff suggest that a schematic or diagram indicating the general locations of these components be

included in the ND, and we ask that a copy be sent to us for our records. As the project is implemented, the locations of the wells, trenches and lateral lines should be incorporated into the Report of Disposal Site Information.

As this project progresses, we ask that the Los Angeles County Local Enforcement Agency be kept informed.

Thank you for the opportunity to review this document. Please contact me at (916) 255-4708 if your have any questions.

cc: Connie Rocke, LEA
Grace Chan, Los Angeles County Sanitation District

Notice of Completion *Supplementary Document M*

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

See NOTE below SCH # 96071071

Project Title: Calabasas Landfill Gas Collection System Master Plan - 1996

Lead Agency: L.A. County Sanitation District No. 2 Contact Person: June Nguyen

Street Address: 1955 Workman Mill Road Phone: 310-699-7411

City: Whittier Zip: 90601 County: Los Angeles

Project Location

County: Los Angeles City/Nearest Community: Calabasas

Cross Streets: Lost Hills Rd & Ventura Freeway Zip Code: 91301 Total Acres: 505

Assessor's Parcel No. Refer to attachment Section: Twp. Range: Base:

Within 2 Miles: State Hwy #: 101 Waterways: None

Airports: None Railways: None Schools: 8 different schools

Document Type

CEQA: ☐ NOP ☐ Supplement/Subsequent ☐ Early Cons ☐ EIR (Prior SCH No.) ☒ Neg Dec ☐ Other ☐ Draft EIR

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other

Local Action Type

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan

☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan

☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.)

☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other

Development Type

☐ Residential: Units Acres

☐ Office: Sq.ft. Acres Employees

☐ Commercial: Sq.ft. Acres Employees

☐ Industrial: Sq.ft. Acres Employees

☐ Educational

☐ Recreational

☐ Water Facilities: Type MGD

☐ Transportation: Type

☐ Mining: Mineral

☐ Power: Type Watts

☐ Waste Treatment: Type

☐ Hazardous Waste: Type

☒ Other: solid waste management facility

Project Issues Discussed in Document

☒ Aesthetic/Visual ☐ Agricultural Land ☒ Air Quality ☒ Archeological/Historical ☐ Coastal Zone ☐ Drainage/Absorption ☐ Economic/Jobs ☐ Fiscal

☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☐ Geologic/Seismic ☐ Minerals ☒ Noise ☐ Population/Housing Balance ☐ Public Services/Facilities ☐ Recreation/Parks

☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☐ Soil Erosion/Compaction/Grading ☐ Solid Waste ☐ Toxic/Hazardous ☐ Traffic/Circulation ☐ Vegetation

☒ Water Quality ☐ Water Supply/Groundwater ☐ Wetland/Riparian ☐ Wildlife ☐ Growth Inducing ☐ Landuse ☐ Cumulative Effects ☐ Other

Present Land Use/Zoning/General Plan Use

Refer to attachment.

Project Description

The proposed project will involve extension of the gas collection system into filled areas for the remaining life of the site.

State Clearinghouse Contact: Mr. Chris Belsky (916) 445-0613

State Review Began: 7.18.96

Dept. Review to Agency 8.9

Agency Rev to SCH 8.14

SCH COMPLIANCE 8.16

Please note SCH Number on all Comments

96071071

Please forward late comments directly to the Lead Agency

AQMD/APCD 33 (Resources: 7.20

Project Sent to the following State Agencies

- X Resources
- ____ Boating
- ____ Coastal Comm
- ____ Coastal Consv
- ____ Colorado Rvr Bd
- ____ Conservation
- X Fish & Game # 5
- ____ Delta Protection
- ____ Forestry
- ____ Parks & Rec/OHP
- ____ Reclamation
- ____ BCDC
- X DWR
- ____ OES

Bus Transp Hous

- ____ Aeronautics
- ____ CHP
- X Caltrans # 7
- ____ Trans Planning
- ____ Housing & Devel

Health & Welfare

- X Drinking H20
- ____ Medical Waste

State/Consumer Svcs

- ____ General Services

Cal/EPA

- X ARB
- X CA Waste Mgmt Bd
- ____ SWRCB: Grants
- ____ SWRCB: Delta
- ____ SWRCB: Wtr Quality
- ____ SWRCB: Wtr Rights
- X Reg. WQCB # 4
- ____ DTSC/CTC

Yth/Adlt Corrections

- ____ Corrections

Independent Comm

- ____ Energy Comm
- ____ NAHC
- ____ PUC
- ____ Santa Mn Mtns
- X State Lands Comm
- ____ Tahoe Rgl Plan
- ____ Other:

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

PROPOSED NEGATIVE DECLARATION

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

FINDINGS: It is hereby found that the above named project will not have a significant effect upon the environment and that there is no evidence that the proposed project will have any potential for adverse effect on wildlife resources. These findings are based upon the independent judgment of County Sanitation District No. 2 of Los Angeles County.

INITIAL STUDY: An initial study of this project was undertaken and prepared in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether this project might have a significant effect on the environment. A copy of such initial study is attached hereto and by reference incorporated herein. Such initial study documents reasons to support the above findings.

MITIGATION MEASURES: None

Date: 7/17/96

Grace R. Chan

Grace R. Chan
Supervising Engineer, Planning Section
Solid Waste Management Department

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

ENVIRONMENTAL IMPACT ASSESSMENT

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

STAFF DETERMINATION: The District's staff, having undertaken and completed an initial study of this project in accordance with the Local Procedures for the Implementation of the California Environmental Quality Act (CEQA) as adopted by the County Sanitation Districts of Los Angeles County for the purpose of ascertaining whether the proposed project might have a significant effect on the environment, has reached the following conclusion:

(x) 1. The project will not have a significant effect on the environment; therefore, a negative declaration should be prepared.

( ) 2. The project, if modified in accordance with certain mitigation measures set forth in the initial study and enumerated in Exhibit "A" attached hereto and by reference incorporated herein will not have a significant effect on the environment. Upon completion of such procedures as may be necessary to assure such modification, a negative declaration should be prepared.

( ) 3. The project may have a significant effect on the environment; therefore, an EIR will be required.

Date: 7/17/96

Grace R. Chan
Supervising Engineer, Planning Section
Solid Waste Management Department

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

INITIAL STUDY

PROJECT TITLE:
Calabasas Landfill Gas Collection System Master Plan - 1996

EXACT LOCATION:
The proposed system will be located at the Calabasas Landfill, 5300 Lost Hills Road, Agoura, California 91301. Exhibits 1 and 2 show the location of the landfill site.

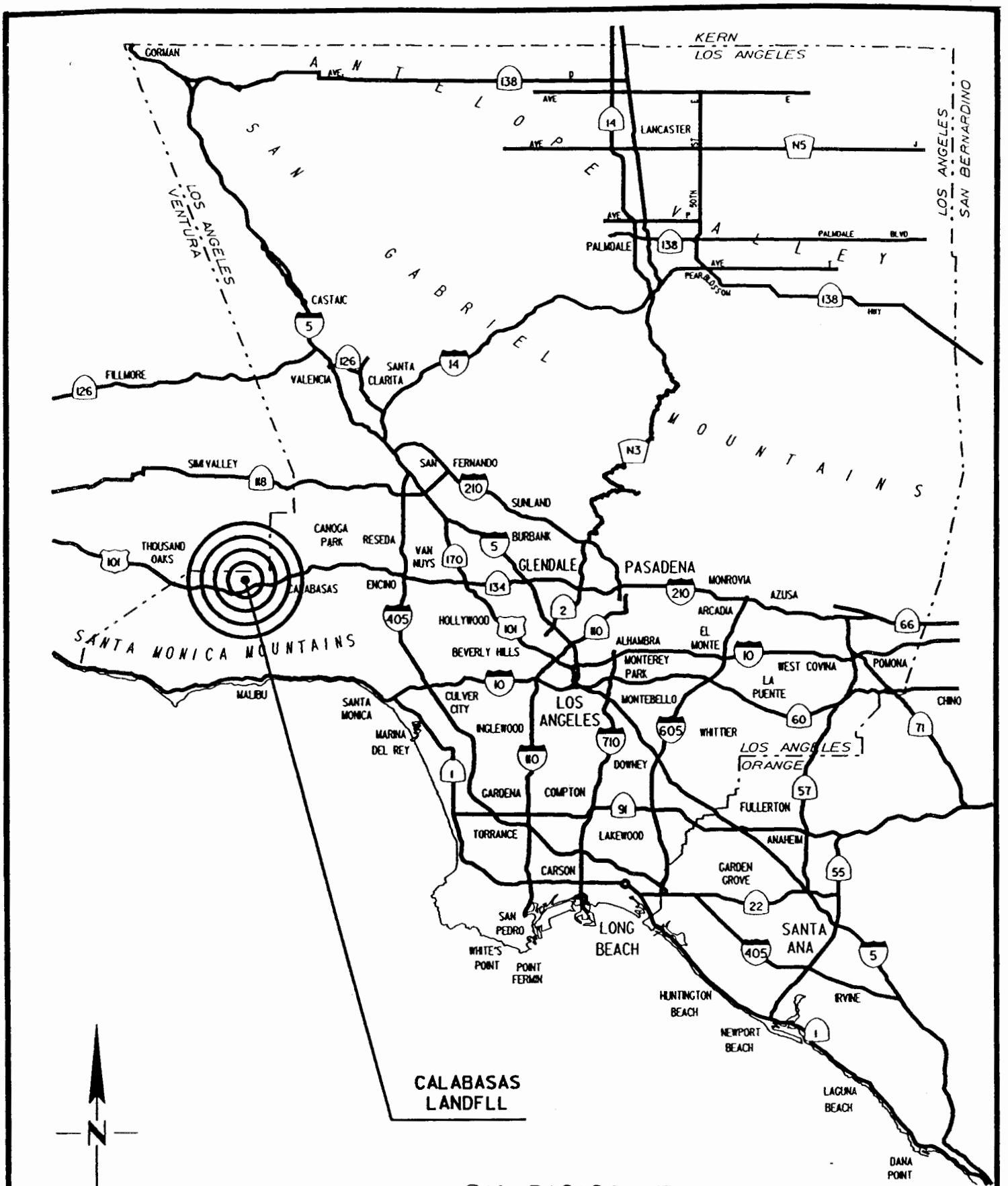
REASON FOR PROJECT:
As an environmental control measure, the landfill gas collection system will be extended into active fill areas over the remaining life of the site (approximately 20 years). Extension of the future gas system will be constructed in compliance with the South Coast Air Quality Management District Rule 1150.1 and Title V (40 CFR 70). Requisite extension of the gas collection system is a routine part of ongoing operations at the site.

DESCRIPTION OF PROJECT:
The proposed project will involve extension of the existing gas collection system into fill areas over the remaining life of the site -- approximately 20 years. The gas collection system master plan will encompass the currently permitted landfill area displayed in Exhibit 3. As areas are filled, the system will be constructed in compliance with the South Coast Air Quality Management District Rule 1150.1. The existing gas system has approximately 509 vertical gas collection wells, 48 horizontal gas collection trenches and 63,000 feet of PVC header lines installed on completed slopes and top deck areas of the active landfill.

In accordance with the Title V (40 CFR 70) permit, the Sanitation Districts of Los Angeles County have prepared the gas collection system plans for the remaining life of the Calabasas Landfill. Construction of gas collection systems are ongoing projects at landfill sites. Under Title V (40 CFR 70), the permitting process will be streamlined into a master plan for approximately 20 years. The Calabasas Landfill Gas Collection System Master Plan proposes 900 additional vertical wells and 165,000 additional linear feet of horizontal trenches to be installed in phased construction over the remaining life of the site. A typical construction project could include approximately 80 wells and 12 trenches and last approximately three months. The specific layout of each construction phase will vary depending upon the geometry of the refuse fill existing at the time of construction. Prior to construction, the drawings and construction schedules will be submitted to the South Coast Air Quality Management District.

The proposed work includes the construction of vertical gas collection wells (both pile-driven and auger drilled), horizontal gas collection trenches, an extension to the condensate system, and an above ground piping system which consists of headers and lateral lines for transport of landfill gas to the existing flaring station. The method of auger drilling vertical wells includes the drilling of the well, installation of the well casing, and backfilling with uncrushed gravel and native soil. The construction of horizontal gas collection trenches consists of trench excavation, the installation of corrugated steel piping, and backfilling with uncrushed gravel and native soil. The collected gas will be combusted at the existing flare station.

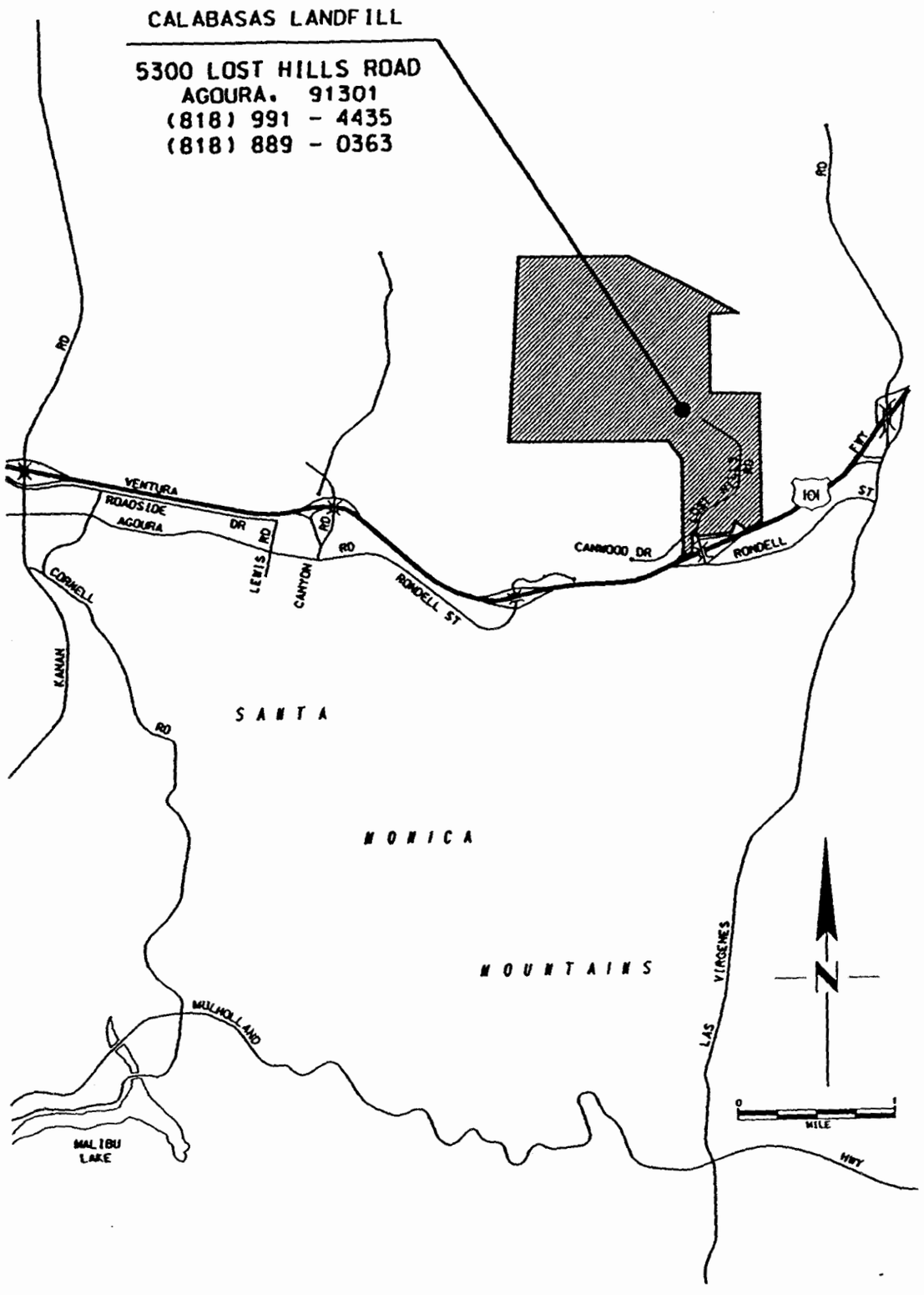
Trenches will be excavated to a depth of approximately 6 feet. Depending on location, the depth of the wells will vary from 40 to 80 feet. Vertical wells will be pile driven in the portion of the existing site where hazardous waste disposal had occurred prior to July 1980. Auger type drilling will take place only



CALABASAS LANDFILL

GENERAL LOCATION MAP

EXHIBIT 1



CALABASAS LANDFILL

VICINITY MAP

EXHIBIT 2

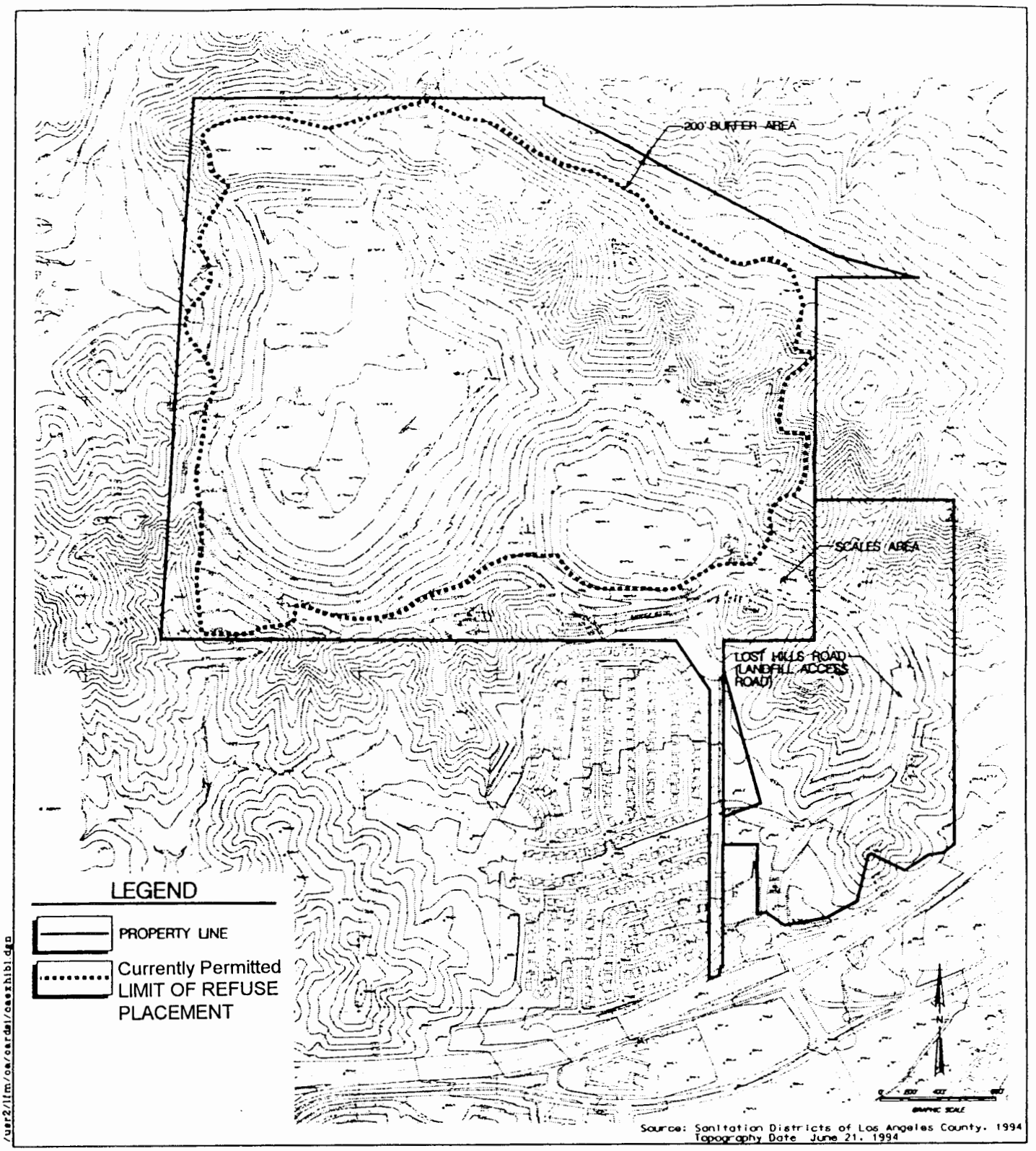


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EXHIBIT 3

CALABASAS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

in native soils or existing disposal areas where no hazardous waste was disposed. Horizontal collection trenches will be placed only in areas where no hazardous waste disposal occurred.

The gas control system currently in place consists of vertical gas wells and horizontal gas trenches, piping systems, a condensate collection system, and a flaring station. Prior to constructing the new gas collection wells, the adjoining header lines will be installed, connected to the existing gas system, and placed under vacuum. A gas well cover box will be used during gas well drilling to control potential odors. This box, in conjunction with existing header lines, will be operable (under vacuum) prior to gas well drilling operations. Exposed spoils resulting from drilling and trenching operations, as well as any open trenches and transfer trucks used, will be deodorized. The excavated refuse material will be disposed of on a continuous basis at the working face of the landfill operation.

Dust abatement procedures will be maintained on a continuing basis during all earth moving activities. Potentially hazardous and flammable gas may be present within the construction site as gas extraction wells and gas collection trenches are constructed and connected to the header pipelines. Monitoring equipment will be used to test for the presence of landfill gas and for adequate levels of oxygen. Appropriate corrective action, such as increasing vacuum to the well cover box, will be taken as necessary. No open flames of any kind will be allowed within 50 feet of open trenches.

Installation of the gas wells will occur during normal landfill operating hours. A drilling operation results in noise levels of approximately 89 dBA at 50 feet. Taking into account attenuation over distance, this translates into a noise level of approximately 71 dBA at the closest residence (approximately 500 feet from drilling operations). This noise level will be under the 75 dBA noise level limit for short-term construction activities allowed by the County of Los Angeles Noise Ordinance.

RESPONSIBLE/REVIEWING AGENCIES:
The following agencies will be involved in the review of the project: California Integrated Waste Management Board, County of Los Angeles Department of Health Services, National Park Service/Santa Monica Mountains National Recreation Area and South Coast Air Quality Management District.

ENVIRONMENTAL SETTING OF PROJECT:
The Calabasas Landfill is located within the Santa Monica Mountains in western Los Angeles County, California (refer to Exhibits 1 and 2). The landfill property consists of 505 acres of land. The land to the south has been developed and is known as the Saratoga Hills and Saratoga Ranch subdivisions. The County property is bounded on the east, west and north by rolling hills with moderate elevation differences. These hills are covered with native grasses and sage scrub. Some slopes are sparsely vegetated; scattered trees are present throughout the area.

The Calabasas Landfill began disposal operations in 1961. It currently accepts only non-hazardous municipal solid waste. The operation handles approximately 2,250 tons per day of refuse. Approximately 17.3 million tons of refuse have been placed since the landfill opened. The remaining life of the site is estimated to be approximately 20 years.

COMPATIBILITY WITH ZONING AND PLANNING:
In June 1958, the Sanitation Districts were granted a zone exception by the Los Angeles County Planning Commission to conduct sanitary landfilling operations on a 300-acre parcel constituting the southern portion of the present property. In June 1967, the Regional Planning Commission granted a zone exception to expand landfill operations into an 80-acre parcel in the northwestern portion of the present property. In August 1972, a Conditional Use Permit (CUP) was issued by the Regional Planning Commission to extend landfill operations into a 36.3-acre parcel in the northeast portion of the Districts'

property. The zone exceptions and the CUP provide for activities associated with the landfill operations. The extension of the gas system is consistent with landfilling operations; thus, the project conforms with zoning regulations.

ENERGY USAGE OF THE PROJECT:

During construction, the project will use relatively small quantities of gasoline and/or diesel fuel for drilling and trenching activities. Upon completion of the project, a small amount of electricity will be used to operate the pumping system and blowers.

ENVIRONMENTAL IMPACTS:

Following is a checklist of possible impacts that could be experienced due to the project. Indirect and ultimate results of the project, direct impacts of the project, and secondary effects of the project were considered.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
1. Earth. Will the proposed project result in:				
a. Unstable earth conditions?	☐	☐	☐	☒
b. Changes in geological substructures?	☐	☐	☐	☒
c. Disruptions, displacements, compaction or over covering of the soil?	☐	☐	☒	☐
d. Change in topography or ground surface relief features?	☐	☐	☐	☒
e. The destruction, covering or modification of any unique geologic or physical features?	☐	☐	☐	☒
f. Any increase in wind or water erosion of soils, either on or off the site?	☐	☐	☐	☒
g. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	☐	☐	☐	☒
h. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	☐	☐	☐	☒

Explanation: Auger drilling of wells and trenching operations will take place into refuse and will not cause disruptions to native soil. Soil disruptions resulting from expansion of the blower system and installation of the gas condensate collection system will be temporary.

2. Air. Will the proposed project result in:				
a. Substantial air emissions?	☐	☐	☒	☐
b. Deterioration of ambient air quality?	☐	☐	☐	☒
c. A contribution to an existing or projected air quality violation?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. The creation of objectionable odors?	☐	☐	☒	☐
e. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	☐	☐	☐	☒

Explanation: Potential air emissions will be prevented by routing all collected landfill gas to the flare system where it will be combusted. Gas system extension will not exceed the limits of current South Coast Air Quality Management District permits. Construction related emissions are expected during construction of the project which is expected to occur in phases over a twenty year period. The total emissions due to the operation of trenching equipment, dump trucks, drilling equipment, loader, water truck and other necessary equipment are estimated to be lower than South Coast Air Quality District's CEQA Handbook construction activities threshold limits for air quality impacts. Construction emissions calculations are shown in the Appendix.

3. Water. Will the proposed project result in:

a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	☐	☐	☐	☒
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?	☐	☐	☐	☒
c. Alterations to the course or flow of flood waters?	☐	☐	☐	☒
d. Change in the amount of surface water in any water body?	☐	☐	☐	☒
e. Discharge into surface waters?	☐	☐	☐	☒
f. Alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity?	☐	☐	☐	☒
g. Alteration of the direction or rate of flow of ground waters?	☐	☐	☐	☒
h. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	☐	☐	☐	☒
i. Substantial reduction in the amount of water otherwise available for public water supplies?	☐	☐	☐	☒
j. Exposure of people or property to water related hazards, such as flooding or tidal waves?	☐	☐	☐	☒

Explanation: This project does not involve, address or result in physical change of any surface or ground waters.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Plant Life. Will the proposed projects result in:				
a. Change in the diversity of species, or number of species of any plants (including trees, shrubs, grass, crops, and aquatic plants)?	☐	☐	☐	☒
b. Reduction of the numbers of any unique, rare or endangered species of plants?	☐	☐	☐	☒
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	☐	☐	☐	☒
d. Reduction in acreage of any agricultural crop?	☐	☐	☐	☒

Explanation: This project does not involve, address or result in physical change due to any plant life or any plant habitat.

5. Animal Life. Will the proposed project result in:				
a. Change in the diversity of species, or numbers of species of any birds, land animals, reptiles, fish, shellfish, benthic organisms?	☐	☐	☐	☒
b. Reduction of the numbers of any unique, rare or endangered species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
c. Introduction of new species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
d. Deterioration to, or reduction of, the habitats of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒
e. Interfere significantly with the movement of any resident or migratory species of birds, land animals, reptiles, fish, shellfish, benthic organisms or insects?	☐	☐	☐	☒

Explanation: The proposed project does not involve nor result in physical change to any animal life.

6. Noise. Will the proposed project result in:				
a. Increases in existing noise levels?	☐	☐	☒	☐
b. Exposure of people to severe noise levels?	☐	☐	☐	☒

Explanation: Drilling operations will result in a short term minor increase in existing noise levels. Drilling will occur during normal landfill hours and will be within the allowable noise level set forth by the County of Los Angeles Noise Ordinance for construction activities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Light and Glare. Will the proposed project produce new light or glare?	☐	☐	☐	☒

Explanation: This project does not involve the installation of any lighting equipment.

8. Land Use. Will the proposed project result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
Will the proposed project conflict with:				
a. Adopted environmental plans and goals of the community where it is located?	☐	☐	☐	☒
b. Applicable city or county adopted general plans for the area?	☐	☐	☐	☒

Explanation: This project involves extension of the future gas collection system as new areas of the site are filled. The proposed activities will not result in a change either in the present or planned land use of the project site.

9. Natural Resources. Will the proposed project result in:				
a. Increase in the rate of use of any natural resources?	☐	☐	☐	☒
b. Substantial depletion of any non-renewable natural resource?	☐	☐	☐	☒

Explanation: The proposed project will not involve the use nor causes the destruction of any natural resources. The proposed project is not expected to significantly accelerate the use of natural resources or deplete non-renewable resources.

10. Risk of Accident. Does the proposed project involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	☐	☐	☒	☐

Explanation: During auger drilling of wells, gas well boxes will be under a slight vacuum to draw off any landfill gas that may be released. As an additional precaution, open flames will not be allowed within 50 feet of well and trench installation operations.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Population.				
a. Will the proposed project alter the location distribution, density, or growth rate of the human population of an area?	☐	☐	☐	☒
b. Does the proposed project include capacity for a population greater than that now resident in the project area?	☐	☐	☐	☒

Explanation: The proposed project will not alter the human population density if any manner, including population density, distribution, or growth rate.

12. Housing. Will the proposed project affect existing housing, or create a demand for additional housing?	☐	☐	☐	☒

Explanation: This project does not affect existing housing or create a demand for additional housing, since it will not affect the population in any manner.

13. Transportation/Circulation. Will the proposed project result in:				
a. Generation of substantial additional vehicular movement?	☐	☐	☐	☒
b. Effects on existing parking facilities, or demand for new parking?	☐	☐	☐	☒
c. Substantial impact upon existing transportation systems?	☐	☐	☐	☒
d. Alterations to present patterns of circulation or movement of people and/or goods?	☐	☐	☐	☒
e. Alterations to waterborne, rail or air traffic?	☐	☐	☐	☒
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	☐	☐	☐	☒

Explanation: There may be a temporary increase in vehicular traffic during the construction activities immediately around the project area due to the presence of contractors and heavy equipment. However, the construction activities will not result in any permanent change in traffic flow at the project site. This project will not affect waterborne, rail or air traffic, and the project site prohibits bicyclist and pedestrian traffic due to safety concerns normally associated with landfilling activities.

14. Public Services. Will the proposed project have an effect upon, or result in a need for new or altered governmental services?	☐	☐	☐	☒

Explanation: Because the project will not affect the population density, distribution, or growth in any manner, there will be no need for new or altered governmental services due to this project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Energy. Will the proposed project either result in or encourage:				
a. Use of substantial amounts of fuel or energy?	☐	☐	☐	☒
b. Substantial increase in demand upon existing sources of energy?	☐	☐	☐	☒
c. A requirement for the development of new sources of energy?	☐	☐	☐	☒

Explanation: Relatively small amounts of fuels will be used for drilling and trenching activities associated with this project. The electrical energy usage of the site will increase slightly due to increased demand on the existing pumps and blowers. However, this increase in energy use is not expected to be substantial.

16. Utilities. Will the proposed project result in a need for new systems of, or substantial alterations to, the following utilities:				
a. Power or natural gas?	☐	☐	☐	☒
b. Communications systems?	☐	☐	☐	☒
c. Water?	☐	☐	☐	☒
d. Sewer or septic tanks?	☐	☐	☐	☒
e. Storm water drainage?	☐	☐	☐	☒
f. Solid waste and disposal?	☐	☐	☐	☒

Explanation: Because the proposed project will not affect the population density, distribution, or growth in any manner, no alteration in the demand for utilities is anticipated.

17. Human Health. Will the proposed project result in:				
a. Creation of any health hazard or potential health hazard (excluding mental health)?	☐	☐	☐	☒
b. Exposure of people to potential health hazards?	☐	☐	☐	☒

Explanation: If necessary, the Contractor will provide and operate a suitable blower of sufficient capacity to maintain the air within the work area in a condition such that concentration of methane gas is within acceptable limits. Gas well cover box assemblies will be used to control the majority of the decomposition gas released from the landfill during gas well auger drilling.

18. Aesthetics. Will the proposed project result in:				
a. The obstruction of any scenic vista or view open to the public?	☐	☐	☐	☒
b. The creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. The destruction of a stand of trees, a rock outcropping or other locally recognized desirable aesthetic natural features?	☐	☐	☐	☒

Explanation: The proposed trenching and drilling activities will not result in an obstruction of a scenic vista or view, nor will they create an aesthetically offensive site.

19. Recreation. Will the proposed project result in an impact upon the quality or quantity of existing recreational opportunities?	☐	☐	☐	☒

Explanation: The proposed project does not involve, address, nor result in any effect on existing recreational opportunities.

20. Archaeological/Historical. Will the proposed project result in an alteration of a significant archaeological, historical, paleontological or cultural site, structure, object or building?	☐	☐	☐	☒

Explanation: The proposed project will not affect a significant archeological, historical, paleontological or cultural site, structure, object or building in any manner.

21. Mandatory Findings or Significance.

a. Does the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b. Does the proposed project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☒
c. Does the proposed project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant)?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Does the proposed project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

MITIGATION MEASURES: Analysis of environmental effects of the project using the checklist identified several areas where the project would have minor effects; however, no significant environmental effects were determined. The list of significant effects (Appendix G in State Guidelines) was also reviewed and none of the significant effects was found to be associated with the project.

PUBLIC CONTROVERSY: There is no public controversy concerning any environmental effects of the project.

Date: 7/17/96

Grace R. Chan
Supervising Engineer, Planning Section
Solid Waste Management Department

ATTACHMENT A

Construction Emissions

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

VERTICAL GAS COLLECTION WELLS - 900 TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System

(per well installation)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Crane Unit (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Auger Drill (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Wheeled Loader (2)	Diesel	4 hrs	0.572 lb/hr	2.288	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Cement Mixer (1)	Diesel	4 hrs	0.434 lb/hr	1.736	0.16 lb/hr	0.64	2.01 lb/hr	8.04	0.133 lb/hr	0.532	0.14 lb/hr	0.56
Water Truck (3)	Diesel	40 mi	37.71 gm/mi	3.33	7.05 gm/mi	0.62	21.9 gm/mi	1.93	0.56 gm/mi	0.05	3.17 gm/mi	0.28
Dump Truck (3)	Diesel	40 mi	37.71 gm/mi	3.33	7.05 gm/mi	0.62	21.9 gm/mi	1.93	0.56 gm/mi	0.05	3.17 gm/mi	0.28
Pick-up Truck (3)	Gasoline	16 mi	26.21 gm/mi	0.92	2.33 gm/mi	0.08	1.53 gm/mi	0.05	0.045 gm/mi	0.00	0.21 gm/mi	0.01
Air (1) Compressor	Gasoline	4 hrs	12.6 lb/hr	50.4	0.421 lb/hr	1.684	0.326 lb/hr	1.304	0.017 lb/hr	0.068	0.021 lb/hr	0.084
Electric Generator (1)	Gasoline	1 hrs	12.6 lb/hr	12.6	0.421 lb/hr	0.421	0.326 lb/hr	0.326	0.017 lb/hr	0.017	0.021 lb/hr	0.021
Total (per well) lbs				78.07		5.99		37.71		2.31		2.91
Total (all wells)				70264		5392		33936		2082		2620

Notes:

(1) Emission factors obtained from EPA-AP42, 1985, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment".

(2) Emission factors obtained from EPA AP-42, 1992, Table II-7.1, "Emission Factors for heavy duty diesel powered construction equipment.

(3) Emission factors obtained from ARB EMFAC7F and E7F for LA Co., 1994, Traveling speed was assumed to be 5 mph.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

HEADER LINE INSTALLATION AND PAINTING - 75,000 FEET TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System

(per 1000 ft header line)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Loader (1)	Diesel	17 hrs	0.572 lb/hr	9.724	0.25 lb/hr	4.25	1.89 lb/hr	32.13	0.182 lb/hr	3.094	0.172 lb/hr	2.924
Air (2) Compressor	Diesel	17 hrs	0.434 lb/hr	7.378	0.16 lb/hr	2.72	2.01 lb/hr	34.17	0.133 lb/hr	2.261	0.143 lb/hr	2.431
Water Truck (3)	Diesel	42 mi	37.71 gm/mi	3.49	7.05 gm/mi	0.65	21.9 gm/mi	2.03	0.56 gm/mi	0.05	3.17 gm/mi	0.29
Pick-up Truck (3)	Gasoline	66 mi	26.21 gm/mi	3.81	2.33 gm/mi	0.34	1.53 gm/mi	0.22	0.045 gm/mi	0.01	0.21 gm/mi	0.03
Dump Truck (3)	Diesel	85 mi	37.71 gm/mi	7.07	7.05 gm/mi	1.32	21.9 gm/mi	4.10	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Delivery Trucks (3)	Diesel	6 mi	37.71 gm/mi	0.50	7.05 gm/mi	0.09	21.9 gm/mi	0.29	0.56 gm/mi	0.01	3.17 gm/mi	0.04
Air (2) Compressor	Gasoline	8 hrs	12.6 lb/hr	100.8	0.421 lb/hr	3.368	0.326 lb/hr	2.608	0.017 lb/hr	0.136	0.021 lb/hr	0.168
Pick-up Truck (3)	Gasoline	66 mi	26.21 gm/mi	3.81	2.33 gm/mi	0.34	1.53 gm/mi	0.22	0.045 gm/mi	0.01	0.21 gm/mi	0.03
Total (per 1000 ft of header) lbs				136.59		13.08		75.77		5.67		6.51
Total (all header)				10244		981		5683		425		489

Notes:

(1) Emission factors obtained from EPA AP-42, 1992, Table II-7.1, "Emission Factors for Heavy-Duty, Diesel-Powered Construction Equipment".

(2) Emission factors obtained from EPA AP-42, 1985, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment".

(3) Emission factors obatained from EMFAC7F and E7F for LA Co., 1994. Traveling speed was assumed to be 5 mph.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TRENCH INSTALLATION - 165,000 FEET TOTAL

Information based upon total emissions calculated for Calabasas 1995 Gas Collection System

(per 1000 ft trench)

Equipment Type	Fuel Used	Operating Units	CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
			Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total	Emission Factor	Total
Loader (1)	Diesel	16 hrs	0.572 lb/hr	9.15	0.25 lb/hr	4	1.89 lb/hr	30.24	0.182 lb/hr	2.91	0.172 lb/hr	2.75
Excavator (1)	Diesel	16 hrs	0.572 lb/hr	9.15	0.25 lb/hr	4	1.89 lb/hr	30.24	0.182 lb/hr	2.91	0.172 lb/hr	2.75
Dump Truck (dirt) (2)	Diesel	84 mi	37.71 gm/mi	6.98	7.05 gm/mi	1.31	21.9 gm/mi	4.06	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Dump Truck (gravel) (2)	Diesel	84 mi	37.71 gm/mi	6.98	7.05 gm/mi	1.31	21.9 gm/mi	4.06	0.56 gm/mi	0.10	3.17 gm/mi	0.59
Water Truck (2)	Diesel	80 mi	37.71 gm/mi	6.65	7.05 gm/mi	1.24	21.9 gm/mi	3.86	0.56 gm/mi	0.10	3.17 gm/mi	0.56
Delivery Trucks (2)	Diesel	10 mi	37.71 gm/mi	0.83	7.05 gm/mi	0.16	21.9 gm/mi	0.48	0.56 gm/mi	0.01	3.17 gm/mi	0.07
Forklift (1)	Diesel	8 hrs	0.572 lb/hr	4.58	0.25 lb/hr	2	1.89 lb/hr	15.12	0.182 lb/hr	1.46	0.172 lb/hr	1.38
Pick-up Trucks (2)	Gasoline	84 mi	26.21 gm/mi	4.85	2.33 gm/mi	0.43	1.53 gm/mi	0.28	0.045 gm/mi	0.01	0.21 gm/mi	0.04
Total (per 1000 ft trench)				49.18		14.44		88.34		7.61		8.72
Total (all trench)				8115		2383		14576		1255		1439

Notes:

(1) Emission factors obtained from EPA AP-423, 1992, Table II-7.1, "Emission Factors for Heavy-Duty, Diesel Powered Construction Equipment".

(2) Emission Factors obtained from ARB EMFAC7F and E7F for LA Co., 1994. Traveling speed was assumed to be 5 mph.

Total Construction Emissions (lbs)

CO	ROG	NOx	SOx	PM
88623	8756	54195	3762	4548

Total Construction Emissions (tons)

CO	ROG	NOx	SOx	PM
44.3	4.4	27.1	1.9	2.3

Additional PM Emissions (tons)
(Trench excavation material, unpaved road travel)

PM
21.2

This gas collection system plan should cover the remaining fill life of the Calabasas Landfill which should last approximately another 20 yrs.
Therefore, the construction emission impacts per quarter until completion are:

	CO	ROG	NOx	SOx	PM	
Masterplan Project	0.6	0.05	0.3	0.02	0.29	tons
Emission Thresholds,SCAB(1)	24.75	2.5	2.5	6.75	6.75	tons

(1) South Coast Air Basin (SCAB) specified thresholds, 1993 CEQA Air Quality Handbook, South Coast Air Quality Management District.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

PM10 EMISSIONS

Trench excavation - 165,000 ft. total

Emission factors from Table A9-9, SCAQMD Guidelines for Preparing CEQA.

Activity	Emission Factor	Units	Activity Amount	Units	PM Emissions (lbs)
Storage pile filling	0.009075	lb/ton dirt	148500	tons	1347.638
Truck filling	0.02205	lb/ton dirt	148500	tons	3274.425
Total PM Emissions					4622

Unpaved Road Travel Emissions

Emission factors from Table A9-9-D, SCAQMD Guidelines for Preparing CEQA

F= 2.1 x (G/12) x (H/30) x [(I/3)^0.7] x [(J/4)^0.5] x [(365-K)/365]

assume all road travel is on unpaved surfaces

Equipment Type	G	H	I	J	K(1)	F	VMT	E
Pick-up trucks	12	15	2	4	313	0.112625	33210	3740
Water trucks	12	15	5	6	313	0.261963	52350	13714
Dump trucks	12	15	5	6	313	0.261963	70095	18362
Delivery Trucks	12	15	15	18	313	0.979005	2100	2056
Total PM Emissions								37872

Notes:
(1) K is the number of days of precipitation. Because all travelled areas at the landfill are watered, this value is 313 days.

Total Additional PM Emissions

42494 lbs

21.2 tons

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Vertical wells (900 wells total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Crane Unit	3600 hrs	9 gal/hr	32400	7.5 lb/1000 gal	243.0	2.67	3.2	229
Auger Drill	3600 hrs	7 gal/hr	25200	7.5 lb/1000 gal	189.0	2.08	3.2	178
Wheeled Loader	3600 hrs	3.2 gal/hr	11520	43.2 lb/1000 gal	497.7	5.47	1.8	46
Cement Mixer	3600 hrs	1 gal/hr	3600	7.5 lb/1000 gal	27.0	0.30	3.2	25
Water Truck	36000 mi	7 mi/gal	5143	7.05 gm/mi (4)	559.5	6.15	0.55	6
Dump Truck	36000 mi	7 mi/gal	5143	7.05 gm/mi (4)	559.5	6.15	0.55	6

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Air Compressor (6)	3600 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Elec. Generator (6)	900 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pick-up Truck (5)	14400 mi	10 mi/gal	1440	2.33 gm/mi	74.0	0.81	0.64	2.03
Total Toxics Emissions						23.65		492

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

(6) Toxic air pollutant emission factors are not available for these stationary IC engines.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Header line (75,000 feet total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Wheeled loader	1275 hrs	3.2 gal/hr	4080	43.2 lb/1000 gal	176.3	1.94	1.8	16.19
Air Compressor (5)	1275 hrs	3.1 gal/hr	3953	37.5 lb/1000 gal	148.2	1.63	0.782	6.81
Water truck	3150 mi	7 mi/gal	450	7.05 gm/mi (4)	49.0	0.54	0.55	0.55
Dump truck	6375 mi	7 mi/gal	911	7.05 gm/mi (4)	99.1	1.09	0.55	1.10
Delivery trucks	450 mi	5 mi/gal	90	7.05 gm/mi (4)	7.0	0.08	0.55	0.11

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Pick-up trucks (6)	4950 mi	10 mi/gal	495	2.33 gm/mi	25.43	0.28	0.64	0.70
Air compressor (7)	600 hrs	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total						5.55		25.5

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Benzene emission factors based on hydrocarbon emissions from EPA AP-42, Table 3.3-1, Formaldehyde emission factors obtained from SCAQMD Table 2, as included in the 1992 ATIR.

(6) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

(7) Toxic air pollutant emission factors are not available for these stationary IC engines.

CALABASAS LANDFILL GAS COLLECTION SYSTEM - MASTER PLAN 1996

TOXIC CONSTRUCTION EMISSIONS

Trench Installation (165,000 feet total)

DIESEL EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Wheeled Loader	2640 hrs	3.2 gal/hr	8448	43.2 lb/1000gal	365.0	4.01	1.8	33.52
Excavator	2640 hrs	3.2 gal/hr	8448	43.2 lb/1000gal	365.0	4.01	1.8	33.52
Forklift	1320 hrs	3.2 gal/hr	4224	43.2 lb/1000gal	182.5	2.01	1.8	16.76
Water truck	13200 mi	7 mi/gal	1885.7	7.05 gm/mi (4)	205.2	2.26	0.55	2.29
Dump truck	27720 mi	7 mi/gal	3960.0	7.05 gm/mi (4)	430.8	4.74	0.55	4.80
Delivery trucks	1650 mi	7 mi/gal	235.7	7.05 gm/mi (4)	25.6	0.28	0.55	0.29

GASOLINE EQUIPMENT								
				Benzene			Formaldehyde	
Equipment Type	Operating Units	Fuel Consumption	Total Fuel Consumed (gal)	HC Emission Factor (3)	HC Emission (lb exhaust)	Total Benzene (lbs) (1)	Emission Factor (gm/gal) (2)	Total Formaldehyde (lbs)
Pick-up trucks (5)	13860 mi	10 mi/gal	1386	2.33 gm/mi	71.19	0.78	0.64	1.96
Total						18.10		93.14

Notes:

(1) Benzene emissions are 1.1% of HC exhaust. Obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(2) Formaldehyde emission factors obtained from EPA "Toxic Air Pollutant Emission Factors - A Compilation For Selected Air Toxic Compounds and Sources", p. 4-133.

(3) Emission factors to estimate the exhaust hydrocarbons are obtained from EPA AP-42, 1992, Table II-7.1.

(4) Emission factor obtained from ARB EMFAC7F, 1994, heavy duty diesel trucks @ 5mph.

(5) Emission factor obtained from ARB EMFAC7F, 1994, light-duty catalytic trucks @ 5mph.

TOTAL TOXIC EMISSIONS FROM CONSTRUCTION:

BENZENE	FORMALDEHYDE	
47.30	610.56	lbs

The annual toxic emissions from construction of this project are compared to the annual emissions form the Scholl Canyon Landfill, as reported in the December 1991, Scholl Canyon Landfill Health Risk Assessment. No such data is available for the Calabasas Landfill because an HRA was not required for this site. As can be seen in the table below, the annual emissions for Scholl Canyon resulted in exposure levels considerable lower than the Exposure Guidelines. Therefore, it is reasonable to predict that the emissions form construction of the master plan (over approximately 20 years), will also result in exposure levels below the Guidelines.

Pollutant	Emissions Reported in HRA		Exposure Guideline (ug/m^3)	Plan Emissions (lb/yr) (1)
	lb/yr	Chronic Exposure (ug/m^3)		
Benzene	149	0.41	71	2.36
Formaldehyde	1118	3.06	3.6	30.53

(1) emissions are based upon total emissions from table above divided by 20 years remaining fill life.

WASTEWATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (310) 699-7411, FAX: (310) 695-6139

CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Mr. Tom Loftus
State Clearinghouse
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

Dear Mr. Loftus:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

Enclosed, for your distribution to Responsible Agencies, are ten copies of the Proposed Negative Declaration and supporting Initial Study for the Calabasas Landfill Gas Collection System Master Plan - 1996. If you have any questions concerning the project, please contact me at the telephone number listed above.

Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

JNN:leh
Enclosure

ATTACHMENT TO
NOTICE OF COMPLETION
(Supplementary Document M)

Project Location

Assessor's Parcel No. 2052-006-900
2052-006-901
2052-010-901
2052-010-907
2052-011-011 (portion)
2052-011-027 (portion)
2052-011-901
2052-012-007
2052-012-011
2052-012-012 (portion)
2052-012-901
2052-012-902
2052-013-901
2052-033-900

Present Land Use/Zoning/General Plan Use

In June 1958, the Sanitation Districts were granted a zone exception by the Los Angeles County Planning Commission to conduct sanitary landfilling operations on a 300-acre parcel constituting the southern portion of the present property. In June 1967, the Regional Planning Commission granted a zone exception to expand landfill operations into an 80-acre parcel in the northwestern portion of the present property. In August 1972, a Conditional Use Permit (CUP) was issued by the Regional Planning Commission to extend landfill operations into a 36.3-acre parcel in the northeast portion of the Districts' property. The zone exceptions and the CUP provide for activities associated with the landfill operations.

Reviewing Agencies Checklist

Supplementary Document N

KEY
S = Document sent by lead agency
X = Document sent by SCH
✓ = Suggested distribution

____Resources Agency
____Boating & Waterways
____Coastal Commission
____Coastal Conservancy
____Colorado River Board
____Conservation
____Fish & Game
____Forestry
____Office of Historic Preservation
____Parks & Recreation
____Reclamation
____S.F. Bay Conservation & Development Commission
____Water Resources (DWR)

Business, Transportation & Housing
____Aeronautics
____California Highway Patrol
____CALTRANS District #_____
____Department of Transportation Planning (headquarters)
____Housing & Community Development

____**Food & Agriculture**

Health & Welfare
S Health Services Los Angeles County

State & Consumer Services
____General Services
____OLA (Schools)

Cal-EPA
____Air Resources Board
S APCD/AQMD
S California Waste Management Board
____SWRCB: Clean Water Grants
____SWRCB: Delta Unit
____SWRCB: Water Quality
____SWRCB: Water Rights
____Regional WQCB #_____ (_____)

Youth & Adult Corrections
____Corrections

Independent Commissions & Offices
____Energy Commission
____Native American Heritage Commission
____Public Utilities Commission
____Santa Monica Mountains Conservancy
____State Lands Commission
____Tahoe Regional Planning Agency

S Other National Park Service/Santa Monica Mountains National Recreation Area

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Public Review Period (to be filled in by lead agency)

Starting Date _____ Ending Date _____

Signature _____ Date _____

Lead Agency (Complete if applicable):
Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: (____) _____

Applicant: _____
Address: _____
City/State/Zip: _____
Phone: (____) _____

For SCH Use Only:
Date Received at SCH _____
Date Review Starts _____
Date to Agencies _____
Date to SCH _____
Clearance Date _____
Notes:

Revised October 1989

Notice of Completion *Supplementary Document M*

See NOTE below

SCH # _____

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

Project Title: Calabasas Landfill Gas Collection System Master Plan - 1996

Lead Agency: L.A. County Sanitation District No. 2 Contact Person: June Nguyen

Street Address: 1955 Workman Mill Road Phone: 310-699-7411

City: Whittier Zip: 90601 County: Los Angeles

Project Location

County: Los Angeles City/Nearest Community: Calabasas

Cross Streets: Lost Hills Rd & Ventura Freeway Zip Code: 91301 Total Acres: 505

Assessor's Parcel No. Refer to attachment Section: _____ Twp. _____ Range: _____ Base: _____

Within 2 Miles: State Hwy #: 101 Waterways: None

Airports: None Railways: None Schools: 8 different schools

Document Type

CEQA: ☐ NOP ☐ Supplement/Subsequent ☐ NEPA: ☐ NOI ☐ Other: ☐ Joint Document

☐ Early Cons ☐ EIR (Prior SCH No.)_____ ☐ EA ☒ Final Document

☒ Neg Dec ☐ Other _____ ☐ Draft EIS ☐ Other_____

☐ Draft EIR ☐ FONSI

Local Action Type

☐ General Plan Update	☐ Specific Plan	☐ Rezone	☐ Annexation
☐ General Plan Amendment	☐ Master Plan	☐ Prezone	☐ Redevelopment
☐ General Plan Element	☒ Planned Unit Development	☐ Use Permit	☐ Coastal Permit
☐ Community Plan	☐ Site Plan	☒ Land Division (Subdivision, Parcel Map, Tract Map, etc.)	☐ Other_____

Development Type

☒ Residential:	*Units*_____ *Acres*_____	☐ Water Facilities:	*Type*_____ *MGD*_____
☐ Office:	*Sq.ft.*_____ *Acres*_____ *Employees*_____	☒ Transportation:	*Type*_____
☐ Commercial:	*Sq.ft.*_____ *Acres*_____ *Employees*_____	☒ Mining:	*Mineral*_____
☒ Industrial:	*Sq.ft.*_____ *Acres*_____ *Employees*_____	☐ Power:	*Type*_____ *Watts*_____
☐ Educational	_____	☒ Waste Treatment:	*Type*_____
☐ Recreational	_____	☐ Hazardous Waste:	*Type*_____
		☒ Other:	solid waste management facility

Project Issues Discussed in Document

☒ Aesthetic/Visual	☐ Flood Plain/Flooding	☐ Schools/Universities	☒ Water Quality
☐ Agricultural Land	☐ Forest Land/Fire Hazard	☐ Septic Systems	☐ Water Supply/Groundwater
☒ Air Quality	☐ Geologic/Seismic	☐ Sewer Capacity	☐ Wetland/Riparian
☒ Archeological/Historical	☐ Minerals	☐ Soil Erosion/Compaction/Grading	☐ Wildlife
☐ Coastal Zone	☒ Noise	☐ Solid Waste	☐ Growth Inducing
☐ Drainage/Absorption	☐ Population/Housing Balance	☐ Toxic/Hazardous	☐ Landuse
☐ Economic/Jobs	☐ Public Services/Facilities	☐ Traffic/Circulation	☐ Cumulative Effects
☐ Fiscal	☐ Recreation/Parks	☐ Vegetation	☐ Other _____

Present Land Use/Zoning/General Plan Use

Refer to attachment.

Project Description

The proposed project will involve extension of the gas collection system into filled areas for the remaining life of the site.

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Revised October 1989

WASTEWATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (310) 699-7411, FAX: (310) 695-6139

CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Oren Realty & Development Co., Inc.
16250 Ventura Boulevard, Suite 160
Encino, CA 91436

Dear Sirs:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

The Sanitation Districts are proposing to extend the gas collection system at the Calabasas Landfill into filled areas for the remaining life of the site. The Sanitation Districts have conducted an Initial Study of the potential environmental effects in accordance with Section 15063 of the State Guidelines for Implementing the California Environmental Quality Act and have concluded that a Negative Declaration is appropriate. Attached for your review and comment(s) are a copy of the Proposed Negative Declaration and the Initial Study. The Sanitation Districts request all comments to be forwarded to the Sanitation Districts on or before August 16, 1996.

If you have any questions or require any additional information, please contact me at the telephone number listed above.

Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

JNN:leh
Enclosure

WASTEWATER RECLAMATION
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CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Mr. Arthur E. Eck
Santa Monica Mountains National Recreation Area
30401 Agoura Road, Suite 100
Agoura Hills, CA 91301

Dear Mr. Eck:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

The Sanitation Districts are proposing to extend the gas collection system at the Calabasas Landfill into filled areas for the remaining life of the site. The Sanitation Districts have conducted an Initial Study of the potential environmental effects in accordance with Section 15063 of the State Guidelines for Implementing the California Environmental Quality Act and have concluded that a Negative Declaration is appropriate. Attached for your review and comment(s) are a copy of the Proposed Negative Declaration and the Initial Study. The Sanitation Districts request all comments to be forwarded to the Sanitation Districts on or before August 16, 1996.

If you have any questions or require any additional information, please contact me at the telephone number listed above.

Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

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CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Ms. Connie Rocke
Los Angeles County Department of Health Services
2525 Corporate Place, Room 150
Monterey Park, CA 91756

Dear Ms. Rocke:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

The Sanitation Districts are proposing to extend the gas collection system at the Calabasas Landfill into filled areas for the remaining life of the site. The Sanitation Districts have conducted an Initial Study of the potential environmental effects in accordance with Section 15063 of the State Guidelines for Implementing the California Environmental Quality Act and have concluded that a Negative Declaration is appropriate. Attached for your review and comment(s) are a copy of the Proposed Negative Declaration and the Initial Study. The Sanitation Districts request all comments to be forwarded to the Sanitation Districts on or before August 16, 1996.

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Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

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CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Ms. Cindy S. Greenwald
Planning Manager
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765-4182

Dear Ms. Greenwald:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

The Sanitation Districts are proposing to extend the gas collection system at the Calabasas Landfill into filled areas for the remaining life of the site. The Sanitation Districts have conducted an Initial Study of the potential environmental effects in accordance with Section 15063 of the State Guidelines for Implementing the California Environmental Quality Act and have concluded that a Negative Declaration is appropriate. Attached for your review and comment(s) are a copy of the Proposed Negative Declaration and the Initial Study. The Sanitation Districts request all comments to be forwarded to the Sanitation Districts on or before August 16, 1996.

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Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

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WASTEWATER RECLAMATION
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Telephone: (310) 699-7411, FAX: (310) 695-6139

CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Mr. Jeff Lee
Saratoga Ranch Homeowners Association
26956 Calamine
Agoura, CA 91301

Dear Mr. Lee:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

The Sanitation Districts are proposing to extend the gas collection system at the Calabasas Landfill into filled areas for the remaining life of the site. The Sanitation Districts have conducted an Initial Study of the potential environmental effects in accordance with Section 15063 of the State Guidelines for Implementing the California Environmental Quality Act and have concluded that a Negative Declaration is appropriate. Attached for your review and comment(s) are a copy of the Proposed Negative Declaration and the Initial Study. The Sanitation Districts request all comments to be forwarded to the Sanitation Districts on or before August 16, 1996.

If you have any questions or require any additional information, please contact me at the telephone number listed above.

Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

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Telephone: (310) 699-7411, FAX: (310) 695-6139

CHARLES W. CARRY
Chief Engineer and General Manager

July 16, 1996
File: 31R-106.10

Mr. Mark DeBie
California Integrated Waste Management Board
Permit & Enforcement Division
Permits Branch
Environmental Review Section
1020 Ninth Street, Suite 300
Sacramento, CA 95814

Dear Mr. DeBie:

Notice of Proposed Negative Declaration
for the Calabasas Landfill Gas Collection System Master Plan - 1996

The Sanitation Districts are proposing to extend the gas collection system at the Calabasas Landfill into filled areas for the remaining life of the site. The Sanitation Districts have conducted an Initial Study of the potential environmental effects in accordance with Section 15063 of the State Guidelines for Implementing the California Environmental Quality Act and have concluded that a Negative Declaration is appropriate. Attached for your review and comment(s) are a copy of the Proposed Negative Declaration and the Initial Study. The Sanitation Districts request all comments to be forwarded to the Sanitation Districts on or before August 16, 1996.

If you have any questions or require any additional information, please contact me at the telephone number listed above.

Very truly yours,

Charles W. Carry

June Nguyen

June Nguyen
Project Engineer
Solid Waste Management Department

JNN:leh
Enclosure

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

NOTICE OF PROPOSED NEGATIVE DECLARATION

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road
Agoura, CA 91301

ENTITY OR PERSON UNDERTAKING PROJECT: County Sanitation District No. 2 of Los Angeles County

PROJECT DESCRIPTION: Landfill gas is the product of natural anaerobic biological decomposition of organic materials, and is composed primarily of carbon dioxide and methane. Landfill gas typically possesses up to about one-half the energy value of natural gas, and therefore represents a valuable energy source. Gas control systems are required at landfills in order to prevent odors and to comply with South Coast Air Quality Management District Rule 1150.1.

The Calabasas Landfill is currently operated as a Class III landfill with approximately 20 years of life remaining. The site has an existing gas control system which must be extended from time to time as refuse cells are constructed. The gas control system consists of vertical gas collection wells, horizontal gas collection trenches, piping for transport of landfill gas to the flaring station for combustion, as well as drain lines for transport of landfill gas condensate to existing storage tanks.

The proposed project will involve extension of the existing gas collection system into filled areas for the remaining life of the site. The project does not involve expansion of the landfill permit area nor does it require expansion of the flare system.

NOTICE IS HEREBY GIVEN THAT County Sanitation District No. 2 of Los Angeles County proposes to issue a Negative Declaration for the above described project. Such Negative Declaration is based upon a finding that the project will not have a significant effect upon the environment. The reasons to support such finding are documented by an initial study prepared by the District. Copies of such initial study and the Proposed Negative Declaration may be obtained from:

Beth Erlanson
Solid Waste Management Department
County Sanitation Districts of Los Angeles County
P. O. Box 4998
Whittier, CA 90607-4998
(310) 699-7411

In accordance with the State Guidelines for the Implementation of the California Environmental Quality Act, any comments concerning the finding of the Proposed Negative Declaration must be received by the District on or before August 16, 1996 in order to be considered prior to the District Board's final determination on the project. Please send your comments, if any, to the address shown above.

PROOF OF PUBLICATION
Los Angeles Times

STATE OF CALIFORNIA
County of Los Angeles

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years; I am not a party to or interested in the notice published. I am the Chief Legal Advertising Clerk of the Publisher of the LOS ANGELES TIMES, a newspaper of general circulation, printed and published daily in the City of Los Angeles, County of Los Angeles. The LOS ANGELES TIMES has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, under the date of May 21, 1952, case Number 598,599. The notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

JULY 18,

all in the year 19 96

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at Los Angeles, California, this

18th *day of* JULY, *19* 96

Signature

COUNTY SANITATION DISTRICT NO. 2 OF LOS ANGELES COUNTY

NOTICE OF PROPOSED NEGATIVE DECLARATION

NAME OF PROJECT: Calabasas Landfill Gas Collection System Master Plan - 1996

LOCATION: 5300 Lost Hills Road, Agoura, Ca 91301

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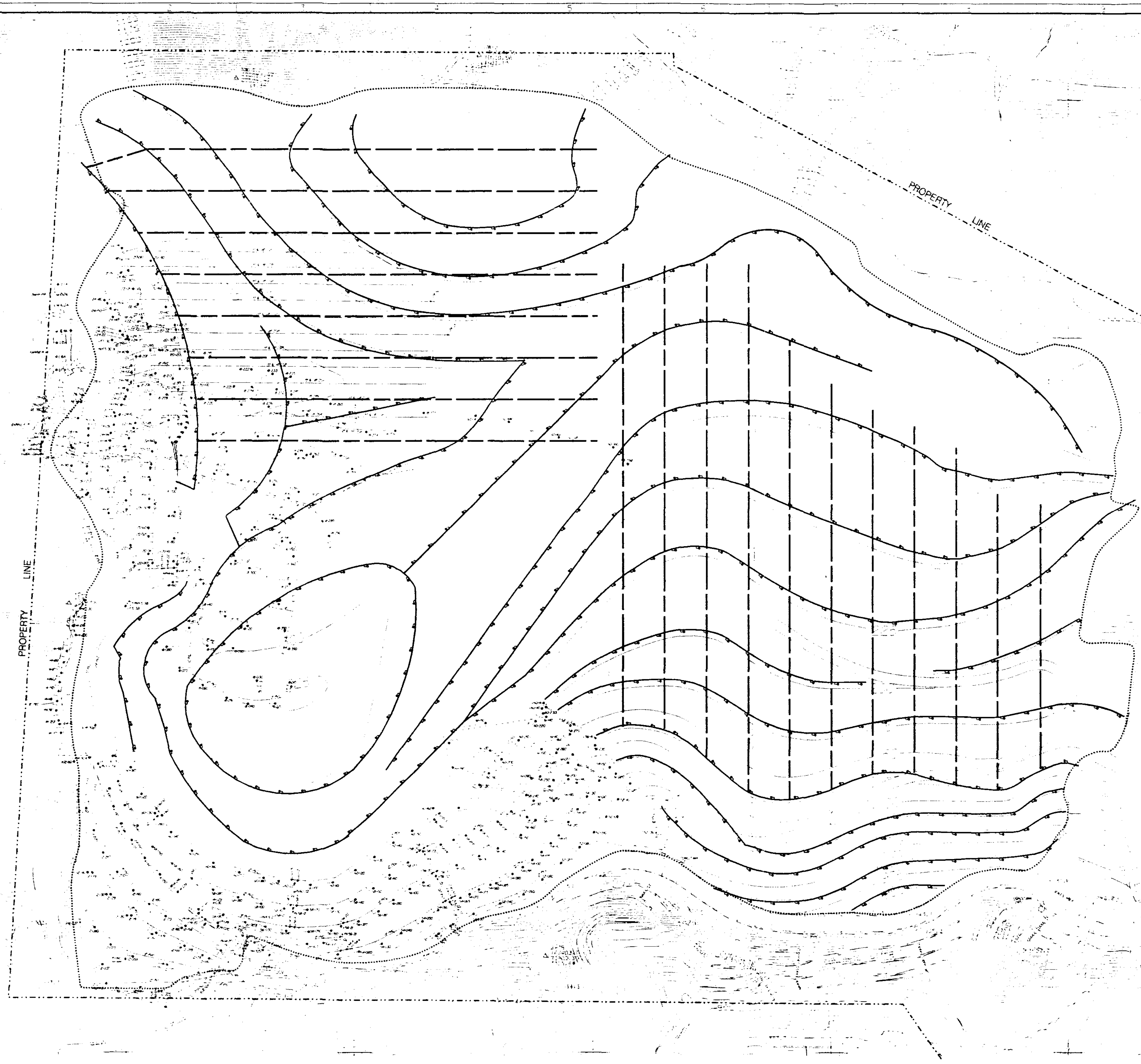
Solid Waste Management Department
County Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-4998
(310) 699-7411

In accordance with the State Guidelines for the implementation of the California Environmental Quality Act, any comments concerning the finding of the Proposed Negative Declaration must be received by the District on or before August 16, 1996 in order to be considered prior to the District Board's final determination on the project. Please send your comments, if any, to the address shown above.

CNS: 1396975

California Newspaper Service Bureau, Inc.
1-800-788-7840
Offices in Los Angeles, Sacramento, San Francisco, and Santa Ana



CALABASAS LANDFILL
GAS COLLECTION SYSTEM MASTER PLAN

TOTAL PERMITTED GAS WELLS	900
TOTAL PERMITTED GAS TRENCH	165,000 LF

LEGEND

- PROPERTY BOUNDARY (505 ACRES)
- PROPOSED GAS TRENCHES
- PROPOSED GAS HEADER AND GAS WELLS
- LIMIT OF FINAL FILL (310 ACRES)
- APPROX. CONTOUR LINES OF FINAL FILL (CUP 5022-5)

WARNING ← 1" → IF THIS LINE IS NOT 1" LONG, THEN DWG IS NOT TO SCALE.

COUNTY SANITATION DISTRICT NO. 2
OF LOS ANGELES COUNTY, CALIFORNIA

DESIGNED M. KROSCHELL
DRAWN M. MALLARI
CHECKED I. DODGE
REVIEWED V. DE PALMA

REFERENCE DWG. NO. / JOB NO.
FIELD BOOK NO.
REVISIONS NO. INITIALS DATE

CALABASAS LANDFILL
GAS COLLECTION SYSTEM

GAS COLLECTION SYSTEM MASTER PLAN

SCALE: 1" = 200'
SHEET NO. C-1
DWG. NO. TITLE 5 PR

c:\dgn\ca\title5\title5pr.dgn

21-JUN-1996 13:52

EXHIBIT 4

WARNING 1" IF THIS LINE IS NOT 1" LONG, THEN DWG IS NOT TO SCALE.

DWG. TITLE 5 PR NO.

SHEET NO. C-1

SCALE: 1" = 200'

GAS COLLECTION SYSTEM MASTER PLAN

CALABASAS LANDFILL
GAS COLLECTION SYSTEM

COUNTY SANITATION DISTRICT NO. 2
OF LOS ANGELES COUNTY, CALIFORNIA

DESIGNED	M. KROSCHELL	4/1/96 DATE
DRAWN	M. MALLARI	DATE
CHECKED	T. DODGE TDD	4/1/96 DATE
REVIEWED	V. DE PALMA	4/1/96 DATE

REFERENCE DWG. NO./JOB NO.

FIELD BOOK NO.

NO.	REVISIONS	INITIALS	DATE

CALABASAS LANDFILL
GAS COLLECTION SYSTEM MASTER PLAN

TOTAL PERMITTED GAS WELLS	900
TOTAL PERMITTED GAS TRENCH	165,000 LF

LEGEND

- PROPERTY BOUNDARY (505 ACRES)
- PROPOSED GAS TRENCHES
- PROPOSED GAS HEADER AND GAS WELLS
- LIMIT OF FINAL FILL (310 ACRES)
- APPROX CONTOUR LINES OF FINAL FILL (CUP 5022-6)

1" = 200'

PROPERTY LINE